

<b>22-2</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the total number of misfeed and troubles. (When the number of total jam is considerably great, it is judged as necessary for repair.)

#### Section

#### Operation/Procedure

The paper jam, trouble counter value is displayed.

MACHINE JAM	Machine JAM counter
RSPF JAM	RSPF JAM counter
TROUBLE	Trouble counter

<b>22-3</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check misfeed positions and the misfeed count of each position. * Presumption of the faulty point by this data is possible.

#### Section

#### Operation/Procedure

The paper jam and misfeed history is displayed from the latest one up to 50 items. (The old ones are deleted sequentially.)

<b>22-4</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the trouble (self diag) history.

#### Section

#### Operation/Procedure

The trouble history is displayed from the latest one up to 30 items. (The old ones are deleted sequentially.)

<b>22-5</b>	
<b>Purpose</b>	Others
<b>Function (Purpose)</b>	Used to check the ROM version of each unit (section).
<b>Section</b>	Firmware

#### Operation/Procedure

The ROM version of the installed unit in each section is displayed. When there is any trouble in the software, use this simulation to check the ROM version, and upgrade the version if necessary.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

S/N	Serial No. (The codes for November and December are "X" and "Y" respectively.)
ICU (MAIN)	ICU (Main section)
ICU (BOOT)	ICU (Boot section)
ICU (SUB)	ICU (Sub section) (ARM9)
LANGUAGE	Language support data version
GRAPHIC	Graphic data for LCD
PCL (MAIN)	PCL (Main section)
PCL (PROFILE)	PCL (Color profile)
PCU	PCU
SCU	SCU
FAX1 (MAIN)	FAX 1-Line (Main section)
DESK	Desk unit
FINISHER	Finisher
NIC	NIC
POWER-CON	Power controller

E-MANUAL	Operation manual (HDD storage) (except 20cpm machine)
WATER MARK	Watermark (HDD storage)
ESCP	ESCP font ROM
PDL	PDL font ROM
PCI	PCI

#### 26cpm/36cpm/31cpm(A) machine

S/N	Serial No. (The codes for November and December are "X" and "Y" respectively.)
UICONTENTS	Content data for display
ICU (MAIN)	ICU (Main section)
ICU (BOOT)	ICU (Boot section)
ICU (SUB)	ICU (Sub section) (ARM9)
LANGUAGE	Language support data version
GRAPHIC	Graphic data for LCD
PCL (MAIN)	PCL (Main section)
PCL (PROFILE)	PCL (Color profile)
PCU	PCU
SCU	SCU
FAX1 (MAIN)	FAX 1-Line (Main section)
DESK	Desk unit
LCC	LCC
FINISHER	Finisher
PUNCH	Punch module
NIC	NIC
POWER-CON	Power controller
E-MANUAL	Operation manual (HDD storage)
WATER MARK	Watermark (HDD storage)
ESCP	ESCP font ROM
ACRE (MAIN)	Enhanced compression kit (Main section)
ACRE (DATA)	Enhanced compression kit (Data section)
PCI	PCI

<b>22-6</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to output the setting/adjustment data (simulation, FAX soft switch, counter), the firmware version, and the counter list.

#### Section

#### Operation/Procedure

\* When installing or servicing, this simulation is executed to print the adjustment data and set data for use in the next servicing. (Memory trouble, PWB replacement, etc.)

1) Select the print list mode with 10-key.

Item/Display		Print list mode	Print content
A	DATA PATTERN	1	Firmware version, counter data, etc.
		2	SIM50-24 data
		3	Data related to the process control

2) Press [EXECUTE] key to start printing the list selected in step 1).

<b>22-8</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the number of operations (counter value) of the finisher, the RSPF, and the scan (reading) unit.

#### Section

#### Operation/Procedure

The counter values of the finisher, the RSPF, and the scanner related counters are displayed.

SPF	Document feed quantity (The number of sheets of discharged documents)
SCAN	Number of times of scan
STAPLER	Staple counter
PUNCHER	Puncher counter
STAMP	Stamp counter
COVER	Document cover open/close counter
HP_ON	Number of scanner HP detection
OC LAMP TIME	Total lighting time of the scanner lamp (* hour * minutes)
SADDLE STAPLER	Saddle staple counter (26cpm/36cpm/31cpm(A) machine only)
SADDLE V FOLD	Saddle finisher V fold counter (26cpm/36cpm/31cpm(A) machine only)

<b>22-9</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the number of use (print quantity) of each paper feed section.
<b>Section</b>	Paper feed, ADU, LCC

#### Operation/Procedure

The counter values related to paper feed are displayed.

TRAY1	Paper feed counter (Paper feed tray 1)
TRAY2	Paper feed counter (Paper feed tray 2)
TRAY3	Paper feed counter (Paper feed tray 3)
TRAY4	Paper feed counter (Paper feed tray 4)
MFT TOTAL	Manual paper feed counter (Total)
MFT HEAVY	Manual paper feed counter (Heavy paper)
MFT OHP	Manual paper feed counter (OHP)
MFT ENV	Manual paper feed counter (Envelope)
ADU	ADU paper transport counter (Paper reverse section)
LCC	Side LCC paper feed counter (LCC) (26cpm/36cpm/31cpm(A) machine only)

<b>22-10</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the system configuration (option, internal hardware).
<b>Section</b>	

#### Operation/Procedure

The system configuration is displayed.

(The model names of the installed devices and options are displayed.)

MACHINE	MX-1810U MX-2010U MX-2310U MX-2610N MX-3111U MX-3110N MX-3610N	Main unit
SPF	MX-RP12 STANDARD	Reversing single pass feeder
STAMP	AR-SU1	Finish stamp
DESK	MX-DE12 MX-DE13 MX-DE14	Stand/1x500 sheet paper drawer Stand/2x500 sheet paper drawer Stand/3x500 sheet paper drawer
LCC	MX-LC11	Large capacity tray (Side LCC)
PUNCHER	MX-PN11A MX-PN11B MX-PN11C MX-PN11D MX-PNX5A MX-PNX5B MX-PNX5C MX-PNX5D	Punch unit
FINISHER	MX-FN17 MX-FN10	Inner finisher Saddle stitch finisher (1K)
FAX1	MX-FX11	Facsimile expansion kit
PRINTER	MX-PB14	Printer expansion kit (PCL)
PS	MX-PK11	PS expansion kit
XPS	MX-PUX1	XPS expansion kit
SECURITY	MX-FR25U MX-FR30U MX-FR34U	Data security kit (commercial version) Data security kit (commercial version) Data security kit (commercial version)
AIM	MX-AMX1	Application integration module
SDRAM (SYS)	*****MB	SDRAM capacity
SDRAM (ICU)	*****MB	SDRAM capacity
HDD	*****MB	Hard disk capacity
SD	*****MB	SD Card capacity
NIC	STANDARD	NIC
BARCODE	MX-PF10	Bar code font
INTERNET-FAX	MX-FWX1	Internet Fax expansion kit
ACM(*)	MX-AMX2	Application communication module
EAM(*)	MX-AMX3	External account module
WEB BROWSING	MX-AM10	Web browsing expansion kit
ACRE	MX-EB11	Enhanced compression kit (ACRE)
MIRRORING	MX-EB12	Mirroring kit
PCI	NOTE CONNECT	PCI generating unit

(\*) Displayed only in the OSA models.

<b>22-11</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the use frequency (send/receive) of FAX. (Only when FAX is installed)
<b>Section</b>	FAX

#### Operation/Procedure

The values of the FAX send counter and the FAX receive counter are displayed.

FAX OUTPUT	FAX print quantity counter (for line 1)
FAX SEND	FAX send counter
FAX RECEIVED	FAX receive counter
SEND IMAGES	FAX send quantity counter (for line 1)
SEND TIME	FAX send time
RECEIVED TIME	FAX receive time

<b>22-12</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the RSPF misfeed positions and the number of misfeed at each position. (When the number of misfeed is considerably great, it can be judged as necessary for repair.)
<b>Section</b>	RSPF

#### Operation/Procedure

The paper jam and misfeed history is displayed from the latest one up to 50 items. (The old ones are deleted sequentially.)

<b>22-13</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the operating time of the process section (OPC drum, DV unit, toner cartridge) and the fusing unit
<b>Section</b>	Process

#### Operation/Procedure

The number of prints and the number of rotations in the process section are displayed.

#### 18cpm/20cpm/23cpm/26cpm/31cpm machine

Item/Display	Content	Print counter	RPM	Number of use days	Life meter	Number of remaining days
MAINTENANCE ALL	Maintenance counter (Total) (Counter)	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
MAINTENANCE COL	Maintenance counter (Color)	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
FUSING BELT	Fusing belt (23cpm/26cpm/31cpm machine only)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
HEAT ROLLER	Heat roller (20cpm model)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
FUSING ROLLER	Fusing roller	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PRESSURE ROLLER	Fusing pressure roller	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
SEPARATE PAWL	Fusing separation pawl	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
SEPARATE PLATE	Fusing separation plate	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
CLEANING ROLLER	Fusing cleaning roller	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TC1 BELT	Primary transfer belt	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TRANSFER BLADE	Transfer cleaning blade	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PTC	PTC	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TC2 BELT	Secondary transfer belt	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PS PAPER	Paper dust cleaner	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
OZONE FILTER	Ozone filter	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (K)	DV unit (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (C)	DV unit (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (M)	DV unit (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (Y)	DV unit (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (K)	OPC drum unit (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (C)	OPC drum unit (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (M)	OPC drum unit (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (Y)	OPC drum unit (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (K)	Main charger (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (C)	Main charger (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (M)	Main charger (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (Y)	Main charger (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (K)	OPC drum cleaning blade K	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (C)	OPC drum cleaning blade C	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (M)	OPC drum cleaning blade M	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (Y)	OPC drum cleaning blade Y	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TONER CTRG (K)	Toner cartridge (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (C)	Toner cartridge (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (M)	Toner cartridge (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (Y)	Toner cartridge (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed

### 36cpm machine

Item/Display	Content	Print counter	RPM	Number of use days	Life meter	Number of remaining days
MAINTENANCE ALL	Maintenance counter (Total) (Counter)	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
MAINTENANCE COL	Maintenance counter (Color)	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
FUSING BELT	Fusing belt	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
FUSING ROLLER	Fusing roller	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PRESSURE ROLLER	Fusing pressure roller	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
SEPARATE PAWL	Fusing separation pawl	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
SEPARATE PLATE	Fusing separation plate	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
FUSING WEB UNIT	Fusing web unit	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
FUSING WEB SEND	Fusing web cleaning send counter	0 - 65535	Not displayed	Not displayed	Not displayed	Not displayed
TC1 BELT	Primary transfer belt	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TRANSFER BLADE	Transfer cleaning blade	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PTC	PTC	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TC2 BELT	Secondary transfer belt	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
PS PAPER	Paper dust cleaner	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
OZONE FILTER	Ozone filter	Max. 8	Not displayed	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (K)	DV unit (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (C)	DV unit (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (M)	DV unit (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DEVE CTRG (Y)	DV unit (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (K)	OPC drum unit (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (C)	OPC drum unit (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (M)	OPC drum unit (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM CTRG (Y)	OPC drum unit (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (K)	Main charger (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (C)	Main charger (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (M)	Main charger (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
MAIN CHARGER (Y)	Main charger (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (K)	OPC drum cleaning blade K	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (C)	OPC drum cleaning blade C	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (M)	OPC drum cleaning blade M	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
DRUM BLADE (Y)	OPC drum cleaning blade Y	Max. 8	Max. 8	0 - 999	0 - 100 (%)	0 - 365
TONER CTRG (K)	Toner cartridge (K)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (C)	Toner cartridge (C)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (M)	Toner cartridge (M)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed
TONER CTRG (Y)	Toner cartridge (Y)	Max. 8	Max. 8	0 - 999	0 - 100 (%)	Not displayed

22-14

<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the use status of the toner cartridge.
<b>Section</b>	Process

#### Operation/Procedure

The status of the toner cartridge is displayed.

Display item	Content	Accumulated No. of installed cartridges (Unit)	Accumulated No. of near end (Unit)	Accumulated No. of end (Unit)	Remaining quantity (Unit: %)
		INSTALL	NN END	END	RESIDUAL
TONER (K)	Toner cartridge use counter (K)	0 - 255	0 - 255	0 - 255	0-25%
TONER (C)	Toner cartridge use counter (C)				25-50%
TONER (M)	Toner cartridge use counter (M)				50-75%
TONER (Y)	Toner cartridge use counter (Y)				75-100%

<b>22-18</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the user data delete history.
<b>Section</b>	

#### Operation/Procedure

The date and time of the user data delete are displayed.

Display item		Content
Item name	Date	
START	Year/month/day/hour/min.	Delete history (Date and time of operation start)
END	Year/month/day/hour/min.	Delete history (Date and time of operation end)

<b>22-19</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to check the values of the counters related to the scan - image send.
<b>Section</b>	

#### Operation/Procedure

Used to display the counter value related to the network scanner  
Change the display with scroll key.

Item/Display		Content
Network scanner	NET SCN ORG_B/W	Network scanner document read quantity counter (B/W scan job)
	NET SCN ORG_CL	Network scanner document read quantity counter (Color scan job)
	NET SCN ORG_2CL	Network scanner document read quantity counter (2-Color scan job)
	NET SCN ORG_SGL	Network scanner document read quantity counter (Single-color scan job)
Internet FAX	INTERNET FAX OUTPUT	Number of internet FAX output
	INTERNET FAX SEND OUTPUT	Number of internet FAX sending page
	INTERNET FAX RECEIVE	Number of internet FAX receive
	INTERNET FAX SEND	Number of internet FAX send
E-Mail	MAIL COUNTER	Number of times of E-MAIL send
FTP	FTP COUNTER	Number of FTP send
Other	SMB SEND	Number of SMB send
	USB CNT	Number of times of USB storage
	TRIAL MODE_B&C	Trial mode counter (B/W & COLOR scan job)
	SCAN TO HDD_B/W	SCAN TO HDD record quantity (B/W)
	SCAN TO HDD_CL	SCAN TO HDD record quantity (COLOR)
	SCAN TO HDD_2CL	SCAN TO HDD record quantity (2-COLOR)
	SCAN TO HDD_SGL	SCAN TO HDD record quantity (SINGLE color)

<b>22-40</b>	
<b>Purpose</b>	Error contents display
<b>Function (Purpose)</b>	Used to display the error code list and the contents.
<b>Section</b>	

#### Operation/Procedure

- 1) Select the main error code.

The sub error code and the contents are displayed.

<b>22-90</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to output the various set data lists.
<b>Section</b>	

#### Operation/Procedure

- 1) Change the display with scroll key.
- 2) Select the print target with the keys on the touch panel.
- 3) Press [EXECUTE] key to start self print of the list.

All setting list (*)	ALL CUSTOM SETTING LIST
Printer test page	PCL SYMBOL SET LIST
	PCL INTERNAL FONT LIST
	PCL EXTENDED FONT LIST
	PS FONT LIST
	PS KANJI FONT LIST (Japan)
	PS EXTENDED FONT LIST
	NIC PAGE
Address registration list (*)	INDIVIDUAL LIST
	GROUP LIST
	PROGRAM LIST (Output Disable)
	MEMORY BOX LIST
	ALL SENDING ADDRESS LIST
Document filing list (*)	DOCUMENT FILING FOLDER LIST
System setting list	ADMIN. SETTINGS LIST (COPY)
	ADMIN. SETTINGS LIST (PRINT)
	ADMIN. SETTINGS LIST (IMAGE SEND)
	ADMIN. SETTINGS LIST (DOC FILING)
	ADMIN. SETTINGS LIST (SECURITY)
	ADMIN. SETTINGS LIST (COMMON)
	ALL ADMINISTRATOR SETTINGS LIST
Receive rejection number table	ANTI JUNK FAX NUMBER LIST
Receive rejection/allow address domain table	ANTI JUNK MAIL/DOMAIN NAME LIST
To E-mail Transfer table list	INBOUND ROUTING LIST
To administrator Transfer list	DOCUMENT ADMIN LIST
Web setting list	WEB SETTING LIST
Meta data set list	METADATA SET LIST

\* When the data list print of system setting is inhibition in DSK model, this setting is invalid.

## 23

<b>23-2</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to output the trouble history list of paper jam and misfeed. (If the number of troubles of misfeed is considerably great, the judgment is made that repair is required.)
<b>Section</b>	

#### Operation/Procedure

Press [EXECUTE] key to execute print.

The trouble history of paper jams and misfeed is printed.

<b>23-80</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operation of paper feed and paper transport in the paper feed section and the paper transport section. Used to output the list of the operation status of the sensor and the detectors in the paper feed section and the paper transport section.
<b>Section</b>	Paper feed, Paper transport

#### Operation/Procedure

When [EXECUTE] key is pressed, the timing list of paper feed and paper transport is outputted.

Used to print the operations timing list of the sensors and detectors in the paper feed and transport section.

The timing list of paper feed and paper transport operations of the latest job (copy or print) on the final paper is printed.

Since the paper feed and paper transport routes differ depending on the used paper feed tray and the print operation mode, the sensor and the detectors and the operation timing also differ.

SECTION	Operation content (Trigger name - Detection operation or load operation name)
STANDARD	Reference value (ms)
CURRENT (*1)	Operation timing (ms) of the latest job on the final paper
PREVIOUS (*1)	Operation timing (ms) of the second latest job on the final paper
MAXIMUM (*1)	Max. operation timing (ms) of all the jobs
MINIMUM (*1)	Min. operation timing (ms) of all the jobs

\*1: The value without unit on the left side of each item on the list has no relation to the operation timing. It is not used in the market.

## 24

<b>24-1</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the jam counter, and the trouble counter. (After completion of maintenance, clear the counters.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select the item to be cleared with the touch panel key.
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

The target counter is cleared.

MACHINE	Machine JAM counter
SPF	RSPF JAM counter
TROUBLE	Trouble counter

<b>24-2</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the number of use (the number of prints) of each paper feed section.
<b>Section</b>	

#### Operation/Procedure

- 1) Select the item to be cleared with the touch panel key.
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

The target counter is cleared.

TRAY1	Tray 1 paper feed counter
TRAY2	Tray 2 paper feed counter
TRAY3	Tray 3 paper feed counter
TRAY4	Tray 4 paper feed counter
MFT TOTAL	Manual paper feed counter (Total)
MFT HEAVY	Manual paper feed counter (Heavy paper)
MFT OHP	Manual paper feed counter (OHP)
MFT ENV	Manual paper feed counter (Envelope)
LCC	LCC paper feed counter (LCC)
ADU	ADU paper feed counter

<b>24-3</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the finisher, RSPF, and the scan (reading) unit counter.
<b>Section</b>	

#### Operation/Procedure

- 1) Select the item to be cleared with the touch panel key.
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

The target counter is cleared.

SPF	RSPF document feed counter (No. of discharged sheets)
SCAN	Scan counter
STAPLER	Staple counter
PUNCHER	Puncher counter
STAMP	Stamp counter
SADDLE STAPLER	Saddle staple counter
SADDLE V FOLD	Saddle finisher V fold counter
COVER	Document cover open/close counter
HP_ON	Number of scanner HP detection
OC LAMP TIME	Total lighting time of the scanner lamp

<b>24-4</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the maintenance counter, the printer counters of the transport unit and the fusing unit. (After completion of maintenance, clear the counters.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select the item to be cleared with the touch panel key.
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

The target counter is cleared.

**18cpm/20cpm/23cpm/26cpm/31cpm machine**

Item/Display		Content
Maintenance	MAINTENANCE ALL	Maintenance counter (Total) (Counter) Maintenance counter (Total) (Number of use days)
	MAINTENANCE COL	Maintenance counter (Color) (Counter) Maintenance counter (Color) (Number of use days)
Fusing	FUSING BELT (23cpm/26cpm/31cpm machine only)	Fusing belt (Counter) Fusing belt (Number of use days) Fusing belt (Accumulated number of rotations)
	HEAT ROLLER (20cpm model)	Heat roller (Counter) Heat roller (Number of use days) Heat roller (Accumulated number of rotations)
	FUSING ROLLER	Fusing roller (Counter) Fusing roller (Number of use days) Fusing roller (Accumulated number of rotations)
	PRESS ROLLER	Pressure roller (Counter) Pressure roller (Number of use days) Pressure roller (Accumulated number of rotations)
Separation	SEPARATE PAWL	Separation pawl (Counter) Separation pawl (Number of use days) Separation pawl (Accumulated number of rotations)
	SEPARATE PLATE	Separation plate (Counter) Separation plate (Number of use days) Separation plate (Accumulated number of rotations)
	CLEAN ROLLER	Cleaning roller (Counter) Cleaning roller (Number of use days) Cleaning roller (Accumulated number of rotations)
Transfer	TC1 BELT	Primary transfer belt (Counter) Primary transfer belt (Number of use days) Primary transfer belt (Accumulated number of rotations)
	TRANS BLADE	Transfer blade (Counter) Transfer blade (Number of use days) Transfer blade (Accumulated number of rotations)
	TC2 BELT	Secondary transfer belt (Counter) Secondary transfer belt (Number of use days) Secondary transfer belt (Accumulated number of rotations)
	PTC	PTC counter (Counter) PTC counter (Number of use days) PTC counter (Accumulated number of rotations)
Drum	DRUM CTRG K	Drum cartridge (K) (Counter) Drum cartridge (K) (Number of use days) Drum cartridge (K) (Accumulated number of rotations)
	DRUM CTRG C	Drum cartridge (C) (Counter) Drum cartridge (C) (Number of use days) Drum cartridge (C) (Accumulated number of rotations)
	DRUM CTRG M	Drum cartridge (M) (Counter) Drum cartridge (M) (Number of use days) Drum cartridge (M) (Accumulated number of rotations)
	DRUM CTRG Y	Drum cartridge (Y) (Counter) Drum cartridge (Y) (Number of use days) Drum cartridge (Y) (Accumulated number of rotations)

Item/Display		Content
Main charger	MAIN CHARGER K	Main charger (K) (Counter) Main charger (K) (Number of use days) Main charger (K) (Accumulated number of rotations)
	MAIN CHARGER C	Main charger (C) (Counter) Main charger (C) (Number of use days) Main charger (C) (Accumulated number of rotations)
	MAIN CHARGER M	Main charger (M) (Counter) Main charger (M) (Number of use days) Main charger (M) (Accumulated number of rotations)
	MAIN CHARGER Y	Main charger (Y) (Counter) Main charger (Y) (Number of use days) Main charger (Y) (Accumulated number of rotations)
Drum blade	DRUM BLADE K	Drum blade K (Counter) Drum blade K (Number of use days) Drum blade K (Accumulated number of rotations)
	DRUM BLADE C	Drum blade C (Counter) Drum blade C (Number of use days) Drum blade C (Accumulated number of rotations)
	DRUM BLADE M	Drum blade M (Counter) Drum blade M (Number of use days) Drum blade M (Accumulated number of rotations)
	DRUM BLADE Y	Drum blade Y (Counter) Drum blade Y (Number of use days) Drum blade Y (Accumulated number of rotations)
Other	PS PAPER	PS paper dust cleaner (Counter) PS paper dust cleaner (Number of use days)
	OZONE FILTER	Ozone filter (Counter) Ozone filter (Number of use days)

**36cpm machine**

Item/Display		Content
Maintenance	MAINTENANCE ALL	Maintenance counter (Total) (Counter) Maintenance counter (Total) (Number of use days)
	MAINTENANCE COL	Maintenance counter (Color) (Counter) Maintenance counter (Color) (Number of use days)
Fusing	FUSING BELT	Fusing belt (Counter) Fusing belt (Number of use days) Fusing belt (Accumulated number of rotations)
	FUSING ROLLER	Fusing roller (Counter) Fusing roller (Number of use days) Fusing roller (Accumulated number of rotations)
	PRESS ROLLER	Pressure roller (Counter) Pressure roller (Number of use days) Pressure roller (Accumulated number of rotations)
Separation	SEPARATE PAWL	Separation pawl (Counter) Separation pawl (Number of use days) Separation pawl (Accumulated number of rotations)
	SEPARATE PLATE	Separation plate (Counter) Separation plate (Number of use days) Separation plate (Accumulated number of rotations)
	FUSING WEB	Fusing web unit print counter Use day of fusing web unit
		Fusing web cleaning send counter

Item/Display		Content
Transfer	TC1 BELT	Primary transfer belt (Counter)
		Primary transfer belt (Number of use days)
		Primary transfer belt (Accumulated number of rotations)
	TRANS BLADE	Transfer blade (Counter)
		Transfer blade (Number of use days)
		Transfer blade (Accumulated number of rotations)
	TC2 BELT	Secondary transfer belt (Counter)
		Secondary transfer belt (Number of use days)
		Secondary transfer belt (Accumulated number of rotations)
	PTC	PTC counter (Counter)
		PTC counter (Number of use days)
		PTC counter (Accumulated number of rotations)
Drum	DRUM CTRG K	Drum cartridge (K) (Counter)
		Drum cartridge (K) (Number of use days)
		Drum cartridge (K) (Accumulated number of rotations)
	DRUM CTRG C	Drum cartridge (C) (Counter)
		Drum cartridge (C) (Number of use days)
		Drum cartridge (C) (Accumulated number of rotations)
	DRUM CTRG M	Drum cartridge (M) (Counter)
		Drum cartridge (M) (Number of use days)
		Drum cartridge (M) (Accumulated number of rotations)
	DRUM CTRG Y	Drum cartridge (Y) (Counter)
		Drum cartridge (Y) (Number of use days)
		Drum cartridge (Y) (Accumulated number of rotations)
Main charger	MAIN CHARGER K	Main charger (K) (Counter)
		Main charger (K) (Number of use days)
		Main charger (K) (Accumulated number of rotations)
	MAIN CHARGER C	Main charger (C) (Counter)
		Main charger (C) (Number of use days)
		Main charger (C) (Accumulated number of rotations)
	MAIN CHARGER M	Main charger (M) (Counter)
		Main charger (M) (Number of use days)
		Main charger (M) (Accumulated number of rotations)
	MAIN CHARGER Y	Main charger (Y) (Counter)
		Main charger (Y) (Number of use days)
		Main charger (Y) (Accumulated number of rotations)
Drum blade	DRUM BLADE K	Drum blade K (Counter)
		Drum blade K (Number of use days)
		Drum blade K (Accumulated number of rotations)
	DRUM BLADE C	Drum blade C (Counter)
		Drum blade C (Number of use days)
		Drum blade C (Accumulated number of rotations)
	DRUM BLADE M	Drum blade M (Counter)
		Drum blade M (Number of use days)
		Drum blade M (Accumulated number of rotations)
	DRUM BLADE Y	Drum blade Y (Counter)
		Drum blade Y (Number of use days)
		Drum blade Y (Accumulated number of rotations)

Item/Display		Content
Other	PS PAPER	PS paper dust cleaner (Counter)
		PS paper dust cleaner (Number of use days)
	OZONE FILTER	Ozone filter (Counter)
		Ozone filter (Number of use days)

\* The winding counter for the fusing web cleaning is cleared by being synchronized with the fusing web cleaning feed counter.

<b>24-5</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the developer counter. (After replacement of developer, clear the counter.)

<b>Section</b>	
<b>Operation/Procedure</b>	
1)	Select the item to be cleared with the touch panel key.
2)	Press [EXECUTE] key.
3)	Press [YES] key.
	The target counter is cleared.

**Note**

When SIM25-2 is executed, this counter is also cleared automatically.

K	Developer cartridge print counter (K)
	Accumulated number of rotations of the developer cartridge (cm) (K)
	Number of day that used developer (Day) K
C	Developer cartridge print counter (C)
	Accumulated number of rotations of the developer cartridge (cm) (C)
	Number of day that used developer (Day) C
M	Developer cartridge print counter (M)
	Accumulated number of rotations of the developer cartridge (cm) (M)
	Number of day that used developer (Day) M
Y	Developer cartridge print counter (Y)
	Accumulated number of rotations of the developer cartridge (cm) (Y)
	Number of day that used developer (Day) Y

<b>24-6</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the copy counter.
<b>Section</b>	

<b>Operation/Procedure</b>	
1)	Select the item to be cleared with the touch panel key.
2)	Press [EXECUTE] key.
3)	Press [YES] key.
	The target counter is cleared.

COPY BW	Copy counter (B/W)
COPY COL	Copy counter (COLOR)
SINGLE COLOR	Single color
2COLOR	2-color



<b>24-9</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used clear the printer mode print counter and the self print mode print counter.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select the item to be cleared with the touch panel key. 2) Press [EXECUTE] key. 3) Press [YES] key. The target counter is cleared.	
PRINT BW	Print counter (B/W)
PRINT COL	Print counter (COLOR)
PRINT (2COL)	Print counter (2-colors)
PRINT (3COL)	Print counter (3-colors)
PRINT (SGL_COL)	Print counter (Single color)
OTHER BW	Other counter (B/W)
OTHER COL	Other counter (COLOR)

<b>24-10</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the FAX counter. (Only when FAX is installed)
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select the item to be cleared with the touch panel key. 2) Press [EXECUTE] key. 3) Press [YES] key. The target counter is cleared.	
FAX OUTPUT	FAX Print quantity counter
FAX SEND	FAX send counter
FAX RECEIVED	FAX receive counter
SEND IMAGES	FAX send quantity counter
SEND TIME	FAX send time
RECEIVED TIME	FAX receive time

24-15

<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the counters related to the scan mode and the image send.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select the item to be cleared with the touch panel key.	
2) Press [EXECUTE] key.	
3) Press [YES] key.	
The target counter is cleared.	

Division	Item/Display	Content
Network scanner	NET SCN ORG_B/W	Network scanner document read quantity counter (B/W scan job)
	NET SCN ORG_CL	Network scanner document read quantity counter (COLOR scan job)
	NET SCN ORG_2CL	Network scanner document read quantity counter (2-color scan job)
	NET SCN ORG_SGL	Network scanner document read quantity counter (single color scan job)

<b>Division</b>	<b>Item/Display</b>	<b>Content</b>
Internet Fax	INTERNET FAX OUTPUT	Number of internet FAX output
	INTERNET FAX SEND OUTPUT	Number of internet FAX sending page
	INTERNET FAX RECEIVE	Number of internet FAX receive
	INTERNET FAX SEND	Number of internet FAX send
E-mail	MAIL COUNTER	Number of times of E-MAIL send
FTP	FTP COUNTER	Number of FTP send
Other	SMB SEND	Number of SMB send
	USB CNT	Number of times of USB storage
	TRIAL MODE_B&C	Trial mode counter (B/W & COLOR scan job)
	SCAN TO HDD_B/W	SCAN TO HDD record quantity (B/W)
	SCAN TO HDD_CL	SCAN TO HDD record quantity (COLOR)
	SCAN TO HDD_2CL	SCAN TO HDD record quantity (2-COLOR)
	SCAN TO HDD_SGL	SCAN TO HDD record quantity (SINGLE color)

<b>24-35</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the toner cartridge use status data.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Press [EXECUTE] key. 2) Press [YES] key. The toner cartridge use status data (SIM22-14) are cleared.	

## 25

<b>25-1</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operations of the developing section.
<b>Section</b>	Process (Developing section)
<b>Operation/Procedure</b>	
1) Select the process speed with [MIDDLE], [LOW] keys. 2) Press [EXECUTE] key. The developing motor and the OPC drum motor rotate for 3 minutes and the output level of the toner density sensor is displayed.	
TCS_K	Toner sensor output value (K)
TCS_C	Toner sensor output value (C)
TCS_M	Toner sensor output value (M)
TCS_Y	Toner sensor output value (Y)
TSG_K	Toner density sensor control voltage level (K)
TSG_C	Toner density sensor control voltage level (C)
TSG_M	Toner density sensor control voltage level (M)
TSG_Y	Toner density sensor control voltage level (Y)
LOW	Process speed: Low speed
MIDDLE	Process speed: Medium speed

### Important

The toner cartridge must be removed before executing this simulation.

If this simulation is executed with the toner cartridge installed, toner will be forcibly supplied to the developing unit, resulting in over-toner and a trouble.

<b>25-2</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to make the initial setting of toner density when replacing developer. (Automatic adjustment)
<b>Section</b>	Image process (Photoconductor/Developing/Transfer/Cleaning)

#### Operation/Procedure

1) Select a color to be adjusted with the touch panel.

2) Press [EXECUTE] key.

The developing motor rotates for 1 min 30 sec, and the toner density sensor makes sampling of the toner density. The detected level is displayed.

After stopping the developing motor, the average value of the toner density sampling results is set as the reference toner density control level.

#### Important

When the above operation is interrupted on the way, the reference toner concentration level is not set. Also when error code of EE-EC, EE-EL or EE-EU is displayed, the reference toner density level is not set normally.

Do not execute this simulation except when new developer is supplied. If it is executed in other cases, undertoner or overtone may occur, causing a trouble.

Division	Item/Display	Display range	Default value
Toner density control adjustment value in the low speed process mode	AT DEVE ADJ_L_K	1 - 255	128
	AT DEVE ADJ_L_C	1 - 255	128
	AT DEVE ADJ_L_M	1 - 255	128
	AT DEVE ADJ_L_Y	1 - 255	128
Toner density control adjustment value in the medium speed process mode	AT DEVE ADJ_M_K	1 - 255	128
	AT DEVE ADJ_M_C	1 - 255	128
	AT DEVE ADJ_M_M	1 - 255	128
	AT DEVE ADJ_M_Y	1 - 255	128
Toner density sensor control voltage level in the low speed process mode	AT DEVE VO_L_K	1 - 255	128
	AT DEVE VO_L_C	1 - 255	128
	AT DEVE VO_L_M	1 - 255	128
	AT DEVE VO_L_Y	1 - 255	128
Toner density sensor control voltage level in the medium speed process mode	AT DEVE VO_M_K	1 - 255	128
	AT DEVE VO_M_C	1 - 255	128
	AT DEVE VO_M_M	1 - 255	128
	AT DEVE VO_M_Y	1 - 255	128

#### Display during execution of the simulation

Item/Display	Content
TCS_K	Toner sensor output value (K)
TCS_C	Toner sensor output value (C)
TCS_M	Toner sensor output value (M)
TCS_Y	Toner sensor output value (Y)
TSG_K	Toner density sensor control voltage level (K)
TSG_C	Toner density sensor control voltage level (C)
TSG_M	Toner density sensor control voltage level (M)
TSG_Y	Toner density sensor control voltage level (Y)

#### Error content

Display	Error name	Error content
EE-EL	EL abnormality	The sensor output level is less than 77, or the control voltage exceeds 207.
EE-EU	EU abnormality	The sensor output level exceeds 177, or the control voltage is less than 52.
EE-EC	EC abnormality	The sensor output level is outside of 128±3.

<b>25-4</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the operation data of the toner supply quantity. (Not used in the market.)
<b>Section</b>	Process

#### Operation/Procedure

The operation data of the toner supply quantity are displayed.

Item/Display	Content	Display range
YLD_CNT_FB	Toner supply FB rate by the yield count	50 - 200
DELTA_DVB	Delta DVB (Process control DVB - Target DVB)	-500 - 500
IDL_DVB	Target DBV	100 - 600
PROCON_DVB	Process control DVB	100 - 600
DV_LIFE	Developer life area	1 - 8
COVERAGE_AREA	Average print rate area	1 - 10
ENV_AREA	Environment area	1 - 8
MULTI_TIME	Toner supply drive time area (Specified by the DV motor rotation time)	1 - 8
PRO_FB_CNT	No. of remaining times of toner supply for the process control result	0 - 65535
PRO_FB_INT	Interval of toner supply for the process control result	0 - 65535
PRO_FB_RATIO	Correction rate of one-time toner supply for the process control result	-10 - 10
RECV_MODE_CNT(+)	No. of times of recovery mode (+) (No. of times of compulsory toner supply)	0 - 65535
RECV_MODE_CNT(-)	No. of times of recovery mode (-) (No. of times of compulsory printing of one-color background image)	0 - 65535

<b>25-5</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the toner density correction data. (Not used in the market.)
<b>Section</b>	Process

#### Operation/Procedure

The toner density correction data are displayed.

Item/Display	Content	Display range
TCS OUTPUT	Toner sensor output value	0 - 255
DELTA_TSG	Toner density sensor control voltage level correction value	-255 - 255
TSG_REF	Toner density sensor control voltage level reference value	0 - 255
TN_FALL_CNT_JOB	Toner fall amount during a job (latest average value)	0 - 255
TN_FALL_JUDGE_CNT	Toner fall judgment threshold value during a job	0 - 255
TN_FALL_MODE_CNT	No. of times of job interruption toner supply operation mode	0 - 255
TN_FALL_CNT_INT	Latest average value of toner fall amount in job interruption toner supply operation	0 - 255
TN_FALL_CNT_NEW	Latest average value of toner fall amount when installing a new toner cartridge	0 - 255
TCS_ERR_MODE_CNT(+)	No. of times of TCS abnormality detection mode (+) (Undertoner)	0 - 65535
TCS_ERR_MODE_CNT(-)	No. of times of TCS abnormality detection mode (-) (Overtone)	0 - 65535

<b>26-1</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set Yes/No of installation of the right paper exit tray.
<b>Section</b>	Paper exit

**Operation/Procedure**

- 1) Enter the set value with 10-key.
  - 2) Press [OK] key. (The set value is saved.)
- This setting is required to use the right paper exit tray unit.

Item/Display			Content
A	0	YES	Paper exit tray: YES
	1	NO	Paper exit tray: NO

<b>26-2</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the paper size of the large capacity tray (LCC). (When the paper size is changed, this simulation must be executed to change the paper size in software.)
<b>Section</b>	Paper feed

**Operation/Procedure**

Select a paper size and a weight system to be changed.

Item	Setting value	Content
LCC	0	8.5 x 11
	1	A4
	2	B5
G/LBS SET	0	GRAM
	1	LBS

Destination	Setting value	
	LCC	G/LBS SET
U.S.A	8.5 x 11	LBS
CANADA	8.5 x 11	LBS
INCH	8.5 x 11	LBS
JAPAN	A4	GRAM
AB_B	A4	GRAM
EUROPE	A4	GRAM
U.K.	A4	GRAM
AUS.	A4	GRAM
AB_A	A4	GRAM
CHINA	A4	GRAM

<b>26-3</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the specifications of the auditor. (Setting must be made according to the auditor use conditions.)
<b>Section</b>	Auditor

**Operation/Procedure**

Select an item to be set with the touch panel.

Item/Display		Content	Default value
BUILT-IN AUDITOR	P10	Built-in auditor mode (standard mode) operation.	P10
OUTSIDE AUDITOR	NONE	No external connection vendor is used.	NONE
	P_VENDOR1	Coin vendor mode (Only the copy mode can be controlled.)	
	P_VENDOR3	Vendor mode in which signals for the intercard connected to the PCU are used for communication in parallel I/F.	
	P_OTHER	Mode for an external auditor connected to the SCU.	
	VENDOR-EX (*1)	Vendor I/F for EQUITRAC	
	VENDOR-EX (MULTI) (*1)	VENDOR-EX + Multi job cueing Enable mode	
	S_VENDOR	Serial vendor mode	
DOC ADJ	ON	Support for the auditor in document filing print	OFF
	OFF	No support for the auditor in document filing print	
PF ADJ	ON	Continuous printing is performed in the duplex print mode. If the remaining money expires during continuous printing, the sheets in the machine are discharged without being printed on the back surfaces.	OFF
	OFF	Continuous printing is not performed in the duplex print mode. (The remaining amount is checked for printing every surface in all the printing process.) If the remaining money expires during printing, the sheet is discharged without printing on the back surface.	
VENDOR MODE (*2)	MODE1	Vendor mode 1	MODE 3
	MODE2	Vendor mode 2	
	MODE3	Vendor mode 3	
COUNTUP TIMING	FUSER_IN	Mode in which the detection timing of the paper lead edge by the sensor after the paper passes the fusing section is used as the money charging timing.	EXIT_OUT
	FUSER_OUT	Mode in which the detection timing of the paper rear edge by the sensor after the paper passes the fusing section is used as the money charging timing.	
	EXIT_OUT	Mode in which the detection timing of the paper rear edge by the paper exit sensor of the right paper exit tray or of the after process unit is used as the money charging timing.	

(\*1) Displayed only when EQUITRAC.

(\*2) Details of the vendor mode

## Details of the vendor mode

	Completion of the specified quantity. (Money remaining)	Insufficient money during copy job		Completion of the specified quantity. (No money remaining)
		BW/Color (no money remaining)	Color (Money remaining)	
	Condition 1	Condition 2	Condition 3	Condition 4
MODE1	Operation 1	Operation 2	Operation 2	Operation 1
MODE2	Operation 1	Operation 1	Operation 2	Operation 1
MODE3	Operation 1	Operation 3	Operation 2	Operation 3

Operation 1:

Standby during setting time of auto clear. Default is 60 seconds, which can be changed in the system setting.

Operation 2:

Auto clear is not made.

Operation 3:

The display is shifted to the initial screen.

<b>26-5</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the count mode of the total counter and the maintenance counter. (A3/11x17 size)
<b>Section</b>	

### Operation/Procedure

- 1) Select an item to be set with scroll keys.
- 2) Enter the setting value with 10-key  
1 = Count up by 1, 2 = Count up by 2
- 3) Press [OK] key.  
The set value in step 2) is saved.

Item/Display	Content	Default value
A TOTAL (B/W)	Total counter (B/W)	1 (Japan) 2 (Except Japan)
B TOTAL (COL)	Total counter (Color)	
C MAINT (B/W)	Maintenance counter (B/W)	
D MAINT (COL)	Maintenance counter (Color)	2
E DEV (B/W)	Developer counter (B/W)	
F DEV (COL)	Developer counter (Color)	

<b>26-6</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the specifications (paper, fixed magnification ratio, etc.) of the destination.
<b>Section</b>	

### Operation/Procedure

- 1) Select an item to be set with the touch panel.
- 2) Press [EXECUTE] key.  
The selected set content is saved.

U.S.A.	United States of America
CANADA	Canada
INCH	Inch series, other destinations
JAPAN	Japan
AB_B	AB series (B5 detection), other destinations
EUROPE	Europe
U.K.	United Kingdom
AUS.	Australia
AB_A	AB series (A5 detection), other destinations
CHINA	China

<b>26-7</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the machine ID. (26cpm/36cpm/31cpm(A) machine)

<b>Section</b>	
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### Operation/Procedure

- 1) Enter the machine ID with the 10-key.  
Max. 30 digits of numerals and alphabetical characters can be inputted.  
To select a desired character, press the 10-key repeatedly.  
Refer to the following list and enter characters.  
Touch the "CONFIRM" section every time a character is inputted.  
To modify an inputted character, delete it with "CLEAR" key and enter the correct character.
- 2) Press [SET] key to set the contents entered in procedure 1).

### Note

The machine ID can be set also by the Web Page service mode function.

Conventionally, the machine ID has been set by the Web Page function. In this mode, this function is made available in the simulation mode.

10-key	Number of times of key input									
	1	2	3	4	5	6	7	8	9	10
1	1	-	-	-	-	-	-	-	-	-
2	A	B	C	a	b	c	2	-	-	-
3	D	E	F	d	e	f	3	-	-	-
4	G	H	I	g	h	i	4	-	-	-
5	J	K	L	j	k	l	5	-	-	-
6	M	N	O	m	n	o	6	-	-	-
7	P	Q	R	S	p	q	r	s	7	-
8	T	U	V	t	u	v	8	-	-	-
9	W	X	Y	Z	w	x	y	z	9	-
0	0	-	-	-	-	-	-	-	-	-

<b>26-10</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the trial mode of the network scanner.

<b>Section</b>	
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### Operation/Procedure

- 1) Enter the set value with 10-key.
- 2) Press [OK] key.  
The set value in step 1) is saved.

TRIAL MODE (0: YES 1: NO)	0	Trial mode setting
	1	Trial mode cancel (Default)

<b>26-18</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set Disable/Enable of the toner save mode operation. (For the Japan and the UK versions.)

#### Section

#### Operation/Procedure

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2) is saved.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Item	Display	Content	Default value
A	COPY	0 Copy toner save mode is inhibited.	0
		1 Copy toner save mode is allowed	
B	PRINTER	0 Printer toner save mode is inhibited.	0
		1 Printer toner save mode is allowed.	

#### 26cpm/36cpm/31cpm(A) machine

Item	Display	Content	Setting range	Default value	NOTE
A	COPY (0: OFF 1: SV1 2: SV2 3: SV3)	0 Copy toner save mode NOT available	0 - 3	0	1: Toner save LOW  3: Toner save HIGH
		1 Copy toner save mode 1			
		2 Copy toner save mode 2			
		3 Copy toner save mode 3			
B	PRINTER (0: OFF 1: SV1 2: SV2 3: SV3)	0 Printer toner save mode NOT available	0 - 3	0	1: Toner save LOW  3: Toner save HIGH
		1 Printer toner save mode 1			
		2 Printer toner save mode 2			
		3 Printer toner save mode 3			
C	COPY TS DISPLAY (0: YES 1: NO)	0 Setting of copy toner save is displayed.	0 - 1	1 (Linked with the set value of SIM26-6.)	
		1 Setting of copy toner save is not displayed.			
D	PRINTER TS DISPLAY (0: YES 1: NO)	0 Setting of printer toner save is displayed.	0 - 1	1 (Linked with the set value of SIM26-6.)	
		1 Setting of printer toner save is not displayed.			

Destination	Default value C	Default value D
U.S.A	0 (Displayed)	0 (Displayed)
CANADA	0 (Displayed)	0 (Displayed)
INCH	0 (Displayed)	0 (Displayed)
JAPAN	1 (Not Displayed)	0 (Displayed)
AB_B	0 (Displayed)	0 (Displayed)
EUROPE	0 (Displayed)	0 (Displayed)
U.K.	1 (Not Displayed)	0 (Displayed)
AUS.	0 (Displayed)	0 (Displayed)
AB_A	0 (Displayed)	0 (Displayed)
CHINA	0 (Displayed)	0 (Displayed)

<b>26-30</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the operation mode corresponding to the CE mark (Europe safety standards). (For slow start to drive the fusing heater lamp)

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.

0	Control allowed
1	Control inhibited

- 2) Press [OK] key.

The set value in step 1) is saved.

\* Even in Enable state, the control may not be executed due to the power frequency, etc.

U.S.A	1 (CE not supported)	EUROPE	0 (CE supported)
CANADA	1 (CE not supported)	U.K.	0 (CE supported)
INCH	1 (CE not supported)	AUS.	0 (CE supported)
JAPAN	1 (CE not supported)	AB_A	0 (CE supported)
AB_B	1 (CE not supported)	CHINA	0 (CE supported)

<b>26-32</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the specifications of the fusing cleaning operation.

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.  
Enable/Disable of the user fusing cleaning function is set.
- 2) Press [OK] key.

Item/Display	Content	Setting range		Default value
A CLEANING PRINT SET	User fusing cleaning function is Enable.	0	YES	1(NO)
	User fusing cleaning function is Disable.	1	NO	

<b>26-35</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the display mode of SIM 22-4 trouble history when a same trouble occurred repeatedly. There are two display modes: display as one trouble and display as several series of troubles.

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.

0	Only once display.
1	Any time display.

- 2) Press [OK] key.

The set value in step 1) is saved.

<b>26-38</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set Continue/Stop of print when the maintenance life is reached.

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.
- 2) Press [OK] key.  
The set value in step 1) is saved.

#### 18cpm/20cpm/23cpm/26cpm/31cpm machine

Item/Display	Content	Default value
A MAINTENANCE LIFE OVER (0: CONTINUE 1: STOP)	0 Setting of Print Continue/ Stop when the maintenance life is over (Print Continue)	0
	1 Setting of Print Continue/ Stop when the maintenance life is over (Print Stop)	

#### 36cpm machine

Item/Display	Content	Default value
A MAINTENANCE LIFE OVER (0: CONTINUE 1: STOP)	0 Setting of Print Continue/ Stop when the maintenance life is over (Print Continue)	0
	1 Setting of Print Continue/ Stop when the maintenance life is over (Print Stop)	
B FUSER WEB END (0: CONTINUE 1: STOP)	0 Continue/Stop setting of print when the fusing web is end (Print Continue)	1
	1 Continue/Stop setting of print when the fusing web is end (Print Stop)	

<b>26-41</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set Enable/Disable of the magnification ratio automatic select function (AMS) in the center binding mode.

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.
- |   |             |
|---|-------------|
| 0 | AMS Disable |
| 1 | AMS Enable  |
- 2) Press [OK] key.  
The set value in step 1) is saved.

#### <Default value of each destination>

U.S.A	0 (Disable)	EUROPE	1 (Enable)
CANADA	0 (Disable)	U.K.	1 (Enable)
INCH	0 (Disable)	AUS.	0 (Disable)
JAPAN	0 (Disable)	AB_A	0 (Disable)
AB_B	0 (Disable)	CHINA	0 (Disable)

<b>26-49</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the print speed of postcards mode.

#### Section

#### Operation/Procedure

Select the copy speed mode with the touch panel. (Default: LOW)

Item/Setting value	Content	Default value
LOW	Postcard copy speed LOW	LOW
HIGH	Postcard copy speed HIGH	

<b>26-50</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set functions.
<b>Section</b>	

#### Operation/Procedure

- 1) Select a target item of setting with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

Item/Display	Content	Default value
A BW REVERSE	0 BW reverse copy Disable	Refer to *1
	1 BW reverse copy Enable	
B COLOR MODE	2-color/Single color copy mode Enable/Disable setting	Refer to *1/*2
C FINISHER FUNCTION	0 Finisher special paper The number of paper exit is limited.	0 Refer to *3
	1 Finisher special paper The number of paper exit is not limited.	
D COLOR MODE (PRINTER)	0 All colors and monochrome counters are displayed.	Refer to *1
	1 All are displayed except for the 3-color print counter.	
	2 Monochrome and full color print counters are displayed.	
E FEED TRAY COLOR	0 Paper feed tray color display ON during paper feed	0
	1 Paper feed tray color display OFF during paper feed	
F LONG SIZE PRINT	0 Long size print enable	0
	1 Long size print disable	

(\*1) Default values for each destination of item A/B/D

Destination	Item A	Item B	Item D
U S A	1	0	2
CANADA	1	0	2
INCH	1	0	2
JAPAN	1	7	2
AB_B	1	0	2
EUROPE	1	0	2
U K	0	0	2
AUS	1	0	2
AB_A	1	0	2
CHINA	1	0	2

(\*2) Item B: COLOR MODE set value (OFF: Displayed/ON: Not displayed)

Set value	Mode		2-Color/Single Counter
	Single	2-color	
0	OFF	OFF	OFF
1	OFF	ON	OFF
2	ON	OFF	OFF
3	ON	ON	OFF
4	OFF	OFF	ON
5	OFF	ON	ON
6	ON	OFF	ON
7	ON	ON	ON

(\*3)

	Target paper	Target paper setting	
		0	1
Inner finisher	Postcard, envelope	The operation is stopped when 10 sheets of a same kind are discharged continuously. When, however, different kinds of sheets are mixed and discharged and 10 or less sheets of a kind are continuously discharged, the operation is stopped by the paper exit tray full detection.	If it is set to "1," the operation is stopped when the paper exit tray is full or when 250 sheets (35.5mm thick) are discharged.
	Label sheet, tab sheet, OHP	The operation is stopped when 100 sheets of a same kind are discharged continuously. When, however, different kinds of sheets are mixed and discharged and 100 or less sheets of a kind are continuously discharged, the operation is stopped by the paper exit tray full detection.	
Saddle stitch finisher	Postcard, envelope	The operation is stopped when 30 sheets of a same kind are discharged continuously. When, however, different kinds of sheets are mixed and discharged and 30 or less sheets of a kind are continuously discharged, the operation is stopped by the paper exit tray full detection.	If it is set to "1," the operation is stopped when the paper exit tray is full or when 500 sheets (67mm thick) are discharged.
	Label sheet, tab sheet, OHP	The operation is stopped when 100 sheets of a same kind are discharged continuously. When, however, different kinds of sheets are mixed and discharged and 100 or less sheets of a kind are continuously discharged, the operation is stopped by the paper exit tray full detection.	

26-51

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the specifications of the serial port operation. (For PCI)

**Section**

#### Operation/Procedure

- 1) Enter the set value with 10-key.  
When the PCI is installed, setting is made to 1 or 2.
- 2) Press [OK] key.

Item/Display	Content	Setting range	Default value
A PCI SETTING	Serial port PCI mode OFF (→For connecting the serial port vendor) Serial port PCI mode ON (JOB status LED: MODE1) Serial port PCI mode ON (JOB status LED: MODE2)	0	0 (Serial port PCI mode OFF)

MODE1: Red LED is light/blink/OFF, MODE2: Red LED always OFF



When "PCI SETTING" is changed from "0" to "1" or "2," if SIM26-03 "OUTSIDE AUDITOR" is set to "S\_VENDOR," "OUTSIDE AUDITOR" is changed to "NONE."

26-52

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set whether non-printed paper (insertion paper, cover paper) is counted up or not.

**Section**

#### Operation/Procedure

- 1) Enter the set value with 10-key.

0	Count up
1	No count up

- 2) Press [OK] key.

The set value in step 1) is saved.

Destination	Default
U.S.A	0 (Counted)
CANADA	0 (Counted)
INCH	0 (Counted)
JAPAN	1 (Not counted)
AB_B	0 (Counted)
EUROPE	0 (Counted)
U.K.	0 (Counted)
AUS.	1 (Not counted)
AB_A	0 (Counted)
CHINA	0 (Counted)

<b>26-53</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	User auto color calibration (color balance adjustment) Inhibit/Allow setting.

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.

Item/Display	Content	Setting range	Default value
A COPY (1:YES 0:NO)	Copy mode	Allow	1
		Inhibit	0
B PRINTER (1:YES 0:NO)	Printer mode	Allow	1
		Inhibit	0

- 2) Press [OK] key.  
The set value in step 1) is saved.

<b>26-65</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the finisher alarm mode.

#### Section

#### Operation/Procedure

Use the touch key to set.

Item	Set value	Content	Setting range	Default value	NOTE
LIMIT SHEETS	30	Number of sheets of stapling: Max. 30	30 or 50	50	A4, A4R, B5, 8.5" x 11", 8.5" x 11"R, 16K, 16KR For saddle stitch finisher
	50	Number of sheets of stapling: Max. 50			
LIMIT COPIES	ON	Number of sets of stapling: Max. 50 sets	ON or OFF	ON	
	OFF	Number of sets of stapling: Not Limited			
LIMIT SHEETS (L)	25	Number of sheets of stapling: Max. 25	25 or 30	25	A3, B4, 11" x 17", 8.5" x 14", 8.5" x 13.5", 8.5" x 13.4", 8.5" x 13", 8K For saddle stitch finisher
	30	Number of sheets of stapling: Max. 30			
SADDLE COPIES	ON	Number of sets loaded in the saddle staple: Limited	ON or OFF	ON	For saddle stitch finisher
	OFF	Number of sets loaded in the saddle staple: Not Limited			

<b>26-69</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the operating conditions for toner near end.

#### Section

#### Operation/Procedure

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2 is saved.

Item/Display	Content	Setting range	Default value
A TONER PREPARATION (0:YES 1:NO)	0 The toner preparation message is displayed.	0 - 1	List of Default values and set values for each destination
	1 The toner preparation message is not displayed.		
B REMAINING TONER LEVEL	0.05 0 Toner preparation at remaining toner level of 5%	0 - 9	
	0.1 1 Toner preparation at remaining toner level of 10%		
	0.15 2 Toner preparation at remaining toner level of 15%		
	0.2 3 Toner preparation at remaining toner level of 20%		
	0.25 4 Toner preparation at remaining toner level of 25%		
	0.3 5 Toner preparation at remaining toner level of 30%		
	0.35 6 Toner preparation at remaining toner level of 35%		
	0.4 7 Toner preparation at remaining toner level of 40%		
	0.45 8 Toner preparation at remaining toner level of 45%		
	0.5 9 Toner preparation at remaining toner level of 50%		
C TONER NEAR END (0:YES 1:NO)	0 The toner near end message is displayed.	0 - 1	
	1 The toner near end message is not displayed.		
D TONER END	1 Operation setup 1	1 - 3	
	2 Operation setup 2		
	3 Operation setup 3		



Item/Display	Content	Setting range	Default value
E	TONER END COUNT	Setting of the number of copy/print/FAX outputs Enable after TONER NEAR END.	1 - 3 1
F	TONER E-MAIL ALERT	0 Low status send of E-mail alert (When the toner preparation message is displayed) (in near near toner end)	0 - 1 1
		1 Low status send of E-mail alert (near toner end)	

**Item E (TONER END COUNT) setting value and printable quantity**

Setting value	Printable quantity at A4/5% equivalent conversion
1	0
2	25
3	50

**<List of Default values and set values for each destination>**

Destination	Setting value			Enable/Disable of print job continuation at toner end
	Toner preparation message	Toner preparation time	Toner near end message	
U.S.A	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	2 (Print operation stopped)
CANADA	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	
INCH	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	
JAPAN	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	1 (Not Displayed)	
AB_B	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	

Destination	Setting value			
	Toner preparation message	Toner preparation time	Toner near end message	Enable/Disable of print job continuation at toner end
EUROPE	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	2 (Print operation stopped)
U.K.	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	
AUS.	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	
AB_A	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	1 (Print operation continued)
CHINA	0 (Displayed)	4 (Displayed when the toner remaining quantity is 25%.)	0 (Displayed)	

(Contents of set items)

A: Enable/Disable setting of the toner preparation message display.

B: The toner remaining quantity at which the toner preparation message is displayed.

C: Enable/Disable setting of the toner preparation message display when the toner near end status is reached.

D: Machine operation at toner end

E: Number of allowable copy/print/FAX when the toner near end message is displayed. (Range: 0 - 50 sheets)

The number of output print allowed in item D is based on the assumption that the sheets are of A4 size with print ratio of 5%. (The number of outputs allowed differs depending on the paper size and the print ratio.)

**Important**

When item A is set to "0" and item E is properly set, printing can be made after toner near end. However, improper phenomena such as insufficient density, thin spots, or improper color balance may result depending on the using conditions. When item E is set to "1" printing is disabled after toner near end. In this case, toner end display is made in the toner near end status, and copy/print/FAX outputs are disabled.

<b>26-71</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the trial mode of the web browsing function. (26cpm/36cpm/31cpm(A) machine)
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key.	
2) Press [OK] key.	

Item/Display	Content	Setting range	Default value
A	WEB BROWSING TRIAL MODE (0: YES 1: NO)	0 - 1	1
	0 Web browsing trial mode setting		
	1 Web browsing trial mode canceling		

<b>26-73</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Enlargement continuous shoot, A3 wide copy mode image loss (shade delete quantity) adjustment
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select an item to be set with scroll keys.	
2) Enter the set value with 10-key.	
3) Press [OK] key.	
When the adjustment value is increased, the image loss (shade delete quantity) is increased.	

Item/Display	Content	Setting range	Default value
A	DELETING SHADOW ADJ (M)	0 - 50	0 (Adjustment amount: 0.1mm/step)
B	DELETING SHADOW ADJ (S)	0 - 50	0 (Adjustment amount: 0.1mm/step)

<b>26-74</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the OSA trial mode.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key.	
2) Press [OK] key.	

Item/Display	Content	Setting range	Default value
A	OSA TRIAL MODE (0: YES 1: NO)	0 - 1	1
	0 Used to set the OSA trial mode.		
	1 OSA trial mode is canceled.		

<b>26-78</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the password of the remote operation panel.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter a password with 10-key. (5 - 8 digits)	
The entered password is displayed on the column of "NEW".	
In order to correct the entered password, press the [clear] key to delete the entered value one digit by one digit.	
2) Press [SET] key.	

<b>26-79</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set YES/NO of the pop-up display of user data delete result.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key.	
The value for the display operation specification after completion of user data delete is set.	
2) Press [OK] key.	

Item/Display	Content	Setting range	Default value
A	DISP SET	User data delete result pop-up display ON	YES 1
		User data delete result pop-up display OFF	NO 0
			0 (NO)

## 27

<b>27-1</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set non-detection of communication error (U7-00) with RIC. (FSS function)
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key.	
0	Not detection
1	Detection

- 2) Press [OK] key.  
The set value in step 1) is saved.

27-2

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the sender's registration number and the HOST server telephone number. (FSS function)
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with touch panel.  
[USER FAX NO] [SERVA TEL NO]
- 2) Enter the set value with 10-key.
- 3) Press [SET] key.  
The set value in step 2) is saved.

USER FAX_NO.	Sender registration number (Max. 16 digits)
SERVA TEL_NO.	Host server telephone number (Max. 16 digits) <ul style="list-style-type: none"> <li>• If the connection process is not completed normally when registering the FSS, calling to the HOST may be continuously made every time when the power is turned ON (from OFF) or rebooted.</li> </ul> In this case, enter "*****" to inhibit calling to the HOST.

27-4

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the initial call and toner order auto send. (FSS function)
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value in step 2) is saved.

Item/Display			Content		Setting range		Default value	Remarks
A	FSS MODE	NEB1	Set the FSS MODE	Exclusive for send in NE-B mode	0 - 3	0	1	
		NEB2		Send/Receive in NE-B mode		1		
		NFB1		Exclusive for send in NE-F mode		2		For convenience stores
		NFB2		Send/Receive in NE-F mode		3		For convenience stores
B	RETRY_BUSY		Resend number setting when busy		0 - 15		2	0: No retry
C	TIMER(MINUTE)_BUSY		Resend timer setting (minute) when busy		1 - 15		3	
D	RETRY_ERROR		Resend number setting when error		0 - 15		1	0: No retry
E	TIMER(MINUTE)_ERROR		Resend timer setting (minute) when error		1 - 15		1	
F	FAX RETRY		Resend number setting when FAX initial connection		0 - 15		2	Unit: Number of times
G	TONER ORDER TIMING(K)	EMPTY	Toner order auto send timing setting (K)	Empty	0 - 11	0	6	
		NEAR_END		Near end		1		
		0.05		0.05		2		
		0.1		0.1		3		
		0.15		0.15		4		
		0.2		0.2		5		
		0.25		0.25		6		
		0.3		0.3		7		
		0.35		0.35		8		
		0.4		0.4		9		
		0.45		0.45		10		
		0.5		0.5		11		

Item/Display			Content		Setting range		Default value	Remarks
H	TONER ORDER TIMING(C)	EMPTY	Toner order auto send timing setting (C)	Empty	0 - 11	0	6	
		NEAR_END		Near end		1		
		0.05		0.05		2		
		0.1		0.1		3		
		0.15		0.15		4		
		0.2		0.2		5		
		0.25		0.25		6		
		0.3		0.3		7		
		0.35		0.35		8		
		0.4		0.4		9		
		0.45		0.45		10		
		0.5		0.5		11		
I	TONER ORDER TIMING(M)	EMPTY	Toner order auto send timing setting (M)	Empty	0 - 11	0	6	
		NEAR_END		Near end		1		
		0.05		0.05		2		
		0.1		0.1		3		
		0.15		0.15		4		
		0.2		0.2		5		
		0.25		0.25		6		
		0.3		0.3		7		
		0.35		0.35		8		
		0.4		0.4		9		
		0.45		0.45		10		
		0.5		0.5		11		
J	TONER ORDER TIMING(Y)	EMPTY	Toner order auto send timing setting (Y)	Empty	0 - 11	0	6	
		NEAR_END		Near end		1		
		0.05		0.05		2		
		0.1		0.1		3		
		0.15		0.15		4		
		0.2		0.2		5		
		0.25		0.25		6		
		0.3		0.3		7		
		0.35		0.35		8		
		0.4		0.4		9		
		0.45		0.45		10		
		0.5		0.5		11		
K	TEMP HISTORY CYCLE		Frequency of acquiring the temperature and humidity history		1 - 1440		60	Unit: min.
L	LOG OUTPUT CAPACITY(PCU)		Log output capacity		0 - 50		30	Unit: [KB]

<b>27-5</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the machine tag No. (This function allows the host computer to check the machine tag No.) (FSS function)
<b>Section</b>	Communication (RIC/MODEM)

#### Operation/Procedure

- Enter the password (max. 8 digits) with 10-key.  
The entered password is displayed on the column of "NEW".  
In order to correct the entered password, press the [clear] key to delete the entered value one digit by one digit.
- Press [SET] key.

<b>27-6</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set of the manual service call. (FSS function)
<b>Section</b>	

#### Operation/Procedure

- Enter the set value with 10-key.

0	Allow (Default)
1	Inhibit

- Press [OK] key.  
The set value in step 1) is saved.

<b>27-7</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set of the enable, alert callout. (FSS function)
<b>Section</b>	

#### Operation/Procedure

- Select an item to be set with scroll keys.
- Enter the set value with 10-key.
- Press [OK] key.  
The set value in step 2) is saved.

Item/Display	Content	Setting range	Default value
A	FUNCTION (0:YES 1:NO)	FSS function enable	1 (NO)
		FSS function disable	
B	ALERT (0:YES 1:NO)	Alert call enable (*1)	0 (YES)
		Alert call disable	
C	CONNECTION (0: FAX 1: No Use 2: HTTP)	FAX connection enable	0 (FAX)
		Not used.	
		HTTP connection enable	

\*1 Alert send timing

No alert cause	Initial state / Trouble / Continuous JAM alert
Maintenance	When the maintenance timing is reached.
Service call	When pressing Service call.
Toner send request	When the toner order automatic send setting is reached.
Toner collection request	Revision of the toner installation date (only for a new product)
Alert resend	

<b>27-9</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the paper transport time recording YES/NO threshold value and shading gain adjustment retry number. (FSS function)
<b>Section</b>	

#### Operation/Procedure

- Select an item to be set with scroll keys.
- Enter the set value with 10-key.
- Press [OK] key.  
The set value in step 2) is saved.

Item/Display	Content	Setting range	Default value
A	FEED TIME1	Threshold value of paper transport time between sensors (Machine)	0 - 100 50(%)
B	FEED TIME2	Threshold value of paper transport time between sensors (SPF)	0 - 100 50(%)
C	GAIN ADJUSTMENT RETRY	Threshold value of the gain adjustment retry number	0 - 20 11 (TIMES)
D	JAM ALERT	Continuous JAM alert judgment threshold value (Alert judgment threshold value for continuous JAM's) (Setting of the number of JAM's continuously made at which it is judged as an alert.)	1 - 100 10 (TIMES)

- \* Items A, B: 0%, standard passing time between sheets of paper; 100%, time for judgment as a jam between sheets of paper.
- \* Item C: Because of a trouble in shading operation, the number of retry is actually not registered.

<b>27-10</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the trouble prediction history information. (FSS function)
<b>Section</b>	

#### Operation/Procedure

- Press [EXECUTE] key.
- Press [YES] key.  
The history information of trouble prediction is cleared.

Target history	Serial communication retry history
	High density process control error history
	Halftone process control error history
	Automatic registration adjustment error history
	Scanner gain adjustment retry history
	Paper transport time between sensors

<b>27-11</b>	
<b>Purpose</b>	Others
<b>Function (Purpose)</b>	Used to check the serial communication retry number and the scanner gain adjustment retry number history. (FSS function)

#### Section

#### Operation/Procedure

The serial communication retry number history and the scanner gain adjustment retry number history are displayed.

Display Item			Content
Item name	Occurrence date (Display)	Retry number	
LSU1	Year/month/day hour: min.: sec.	8 digits	Serial communication retry number history display
LSU2	Year/month/day hour: min.: sec.	8 digits	
DESK1	Year/month/day hour: min.: sec.	8 digits	
DESK2	Year/month/day hour: min.: sec.	8 digits	
FINISHER1	Year/month/day hour: min.: sec.	8 digits	
FINISHER2	Year/month/day hour: min.: sec.	8 digits	
SCAN GAIN ADJ1	Year/month/day hour: min.: sec.	8 digits	Scanner gain adjustment retry history
SCAN GAIN ADJ2	Year/month/day hour: min.: sec.	8 digits	
SCAN GAIN ADJ3	Year/month/day hour: min.: sec.	8 digits	
SCAN GAIN ADJ4	Year/month/day hour: min.: sec.	8 digits	
SCAN GAIN ADJ5	Year/month/day hour: min.: sec.	8 digits	Scanner gain adjustment retry history

<b>27-13</b>	
<b>Purpose</b>	Others
<b>Function (Purpose)</b>	Used to check the history of paper transport time between sensors. (FSS function)

#### Section

#### Operation/Procedure

Change the display with scroll key.

	Item/Display	Content	Occurrence date	Code between sensors	Passing time	Reference passing time
Main unit	FEED TIME1	History of paper transport time between sensors 1	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME2	History of paper transport time between sensors 2	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME3	History of paper transport time between sensors 3	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME4	History of paper transport time between sensors 4	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME5	History of paper transport time between sensors 5	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME6	History of paper transport time between sensors 6	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME7	History of paper transport time between sensors 7	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME8	History of paper transport time between sensors 8	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME9	History of paper transport time between sensors 9	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME10	History of paper transport time between sensors 10	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)

<b>27-12</b>	
<b>Purpose</b>	Others
<b>Function (Purpose)</b>	Used to check the high density, halftone process control and the automatic registration adjustment error history. (FSS Function)

#### Section

#### Operation/Procedure

The high density, halftone process control and the automatic registration adjustment error history is displayed.

HV_ERR1	High density process control error history 1
HV_ERR2	High density process control error history 2
HV_ERR3	High density process control error history 3
HV_ERR4	High density process control error history 4
HV_ERR5	High density process control error history 5
H_TONE_ERR1	Halftone process control error history 1
H_TONE_ERR2	Halftone process control error history 2
H_TONE_ERR3	Halftone process control error history 3
H_TONE_ERR4	Halftone process control error history 4
H_TONE_ERR5	Halftone process control error history 5
AUTO REG ADJ1	Automatic registration adjustment error history 1
AUTO REG ADJ2	Automatic registration adjustment error history 2
AUTO REG ADJ3	Automatic registration adjustment error history 3
AUTO REG ADJ4	Automatic registration adjustment error history 4
AUTO REG ADJ5	Automatic registration adjustment error history 5

	Item/Display	Content	Occurrence date	Code between sensors	Passing time	Reference passing time
RSPF	FEED TIME1 (SPF)	History of paper transport time between SPF sensors 1	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME2 (SPF)	History of paper transport time between SPF sensors 2	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME3 (SPF)	History of paper transport time between SPF sensors 3	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME4 (SPF)	History of paper transport time between SPF sensors 4	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME5 (SPF)	History of paper transport time between SPF sensors 5	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME6 (SPF)	History of paper transport time between SPF sensors 6	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME7 (SPF)	History of paper transport time between SPF sensors 7	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME8 (SPF)	History of paper transport time between SPF sensors 8	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME9 (SPF)	History of paper transport time between SPF sensors 9	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)
	FEED TIME10 (SPF)	History of paper transport time between SPF sensors 10	Year/month/day hour: min.: sec.	5 digits	5 digits (ms)	5 digits (ms)

27-14

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the FSS function connection test mode.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key.	
0	Disable (Default)
1	Enable

- 2) Press [OK] key.  
The set value in step 1) is saved.

27-15

<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to display the FSS connection status.
<b>Section</b>	
<b>Operation/Procedure</b>	
The FSS operating status is displayed.	

Item/Display	Content	Setting range		Default value
FSS CONNECTION	Used to display the FSS connection status.	0	Not operated	0
		1	Operated	

27-16

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the FSS alert send.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Enter the set value with 10-key. The value for the FSS alert operation specification is set.	
2) Press [OK] key.	

	Item/Display	Content	Setting range	Default value
A	MAINTENANCE ALERT (0:YES 1:NO)	Maintenance alert send Enable setting	0	0
		Alert send Disable	1	
B	TONER ORDER ALERT (0:YES 1:NO)	Toner order alert send Enable setting	0	0
		Alert send Disable	1	
C	TONER CTRG ALERT (0:YES 1:NO)	Toner cartridge replacement alert send Enable setting	0	0
		Alert send Disable	1	
D	JAM ALERT (0:YES 1:NO)	Continuous JAM alert send Enable setting	0	0
		Alert send Disable	1	
E	TROUBLE ALERT (0:YES 1:NO)	Trouble alert send Enable setting	0	0
		Alert send Disable	1	
F	PAPER ORDER ALERT (0:YES 1:NO)	Paper order alert send Enable setting	0	0
		Alert send Disable	1	

27-17

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the FSS paper order alert.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select an item to be set.	
2) Enter the set value with 10-key. The value for the FSS paper order alert operation specification is set.	
3) Press [SET] key.	

Item/Display	Content	Setting range	Default value	NOTE
PAPER TYPE SET	Setting of paper kind for paper order alert	0 - 2	0	0: Standard paper and recycled paper
				1: Standard paper only
				2: Recycled paper only
A3	Paper order number setting [Number of sheets] (A3)	500 - 5000	1250	Unit: No. of sheets for a box
A4	Paper order number setting [Number of sheets] (A4)	500 - 5000	2500	Unit: No. of sheets for a box
B4	Paper order number setting [Number of sheets] (B4)	500 - 5000	2500	Unit: No. of sheets for a box
B5	Paper order number setting [Number of sheets] (B5)	500 - 5000	2500	Unit: No. of sheets for a box
A3: FIRST	Paper order alert number setting (A3) (Number of used sheets)	500 - 10000	1000	Unit: No. of alert sheets for the first time
A4: FIRST	Paper order alert number setting (A4) (Number of used sheets)	500 - 10000	1000	Unit: No. of alert sheets for the first time
B4: FIRST	Paper order alert number setting (B4) (Number of used sheets)	500 - 10000	1000	Unit: No. of alert sheets for the first time
B5: FIRST	Paper order alert number setting (B5) (Number of used sheets)	500 - 10000	1000	Unit: No. of alert sheets for the first time

<b>27-18</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the FSS paper feed retry counter.

#### Section

#### Operation/Procedure

- 1) Select an item to be cleared.
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

The target counter is cleared.

Item/Display	Content
TRAY1	Tray 1 paper feed retry counter
TRAY2	Tray 2 paper feed retry counter
TRAY3	Tray 3 paper feed retry counter
TRAY4	Tray 4 paper feed retry counter
MFT	Manual paper feed retry counter
LCC	LCC paper feed retry counter

## 30

<b>30-1</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operations of the sensors and the detectors in other than the paper feed section and the control circuits.

#### Section

#### Operation/Procedure

The operating conditions of the sensors and detectors are displayed.

The sensors and the detectors which are turned ON are highlighted.

PPD1	Paper transport detector 1
PPD2	Paper transport detector 2
POD1	Paper exit detector 1
POD2	Paper exit detector 2
POD3	Paper exit detector 3
TFD2	Paper exit tray full detector (Face-down tray)
TFD3	Paper exit tray full detector (Right paper exit tray)
SHPOS	Shifter home positions sensor
DSW_R	ADU open/close detector
DSW_C	Transport cover open/close detector (Paper feed tray 1)
DSW_F	Front cover open/close detector
DHPD_CL	OPC drum rotation sensor (CL)
DHPD_K	OPC drum rotation sensor (BK)
TNFD	Waste toner full detector
HLPCD	Fusing roller pressure detector
DSW_C2	Transport cover open/close detector (Paper feed tray 2)
PRTPD	Paper exit tray paper detector (Right paper exit tray)
1TUD_CL	Transfer mode detector (CL)
1TUD_K	Transfer mode detector (BK)
2TUD	Secondary transfer position detector
WEBEND	Web end detector (36cpm machine)

<b>30-2</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operations of the sensors and the detectors in the paper feed section and the control circuits.

#### Section

#### Operation/Procedure

The operating conditions of the sensors and detectors are displayed.

The sensors and the detectors which are turned ON are highlighted.

CPFD1	Paper transport detector (Paper feed tray 1)
CLUD1	Paper feed tray upper limit sensor (Paper feed tray 1)
CPED1	Paper empty sensor (Paper feed tray 1)
CSPD1	Paper remaining quantity sensor (Paper feed tray 1)
CSS11	Paper feed tray size detector (Paper feed tray 1)(*1)
CSS12	
CSS13	
CSS14	
CPFD2	Paper transport detector (Paper feed tray 2)
CLUD2	Paper feed tray upper limit sensor (Paper feed tray 2)
CPED2	Paper empty sensor (Paper feed tray 2)
CSPD2	Paper remaining quantity sensor (Paper feed tray 2)
CSS21	Paper feed tray paper size detector (Paper feed tray 2)
CSS22	
CSS23	
CSS24	
CSS1	Paper feed tray 1 detector
CSS2	Paper feed tray 2 detector (*1)
CSS2SET	Desk installation detection
MPLD	Paper length detector (Manual paper feed tray)
MPED	Paper empty sensor (Manual paper feed tray)

\*1: Displayed, but not installed in some models.



## 33

<b>33-2</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to delete the ID (IDM) information of Felica card. (23cpm/31cpm(G) machine only)

### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.  
The ID (IDM) information of Felica card is deleted.

## 40

<b>40-2</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Manual paper feed tray paper width sensor adjustment.
<b>Section</b>	Paper feed

#### Operation/Procedure

- 1) Open the manual paper feed guide to the max. width (MAX).
- 2) Press [EXECUTE] key.  
The max. width (MAX) detection level is recognized.
- 3) Open the manual paper feed guide to P1 width (A4).
- 4) Press [EXECUTE] key.  
The P1 width (A4) detection level is recognized.
- 5) Open the manual paper feed guide to P2 width (A4R).
- 6) Press [EXECUTE] key.  
The P2 width (A4R) detection level is recognized.
- 7) Open the manual paper feed guide to the min. width (MIN).
- 8) Press [EXECUTE] key.  
The min. width (MIN) detection level is recognized.

When the above operation is not performed normally, "ERROR" is displayed. When completed normally, "COMPLETE" is displayed.

MAX POSITION	Manual feed max. width
P1(A4)POSITION	Manual feed P1 position width (A4)
P2(A4R)POSITION	Manual feed P2 position width (A4R)
MIN POSITION	Manual feed min. width

<b>40-7</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the adjustment value of the manual paper feed tray paper width sensor.
<b>Section</b>	Paper feed

#### Operation/Procedure

- 1) Select a target item to be adjusted with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value in step 2) is saved.

	Item/Display	Content	Default value
A	MAX POSITION	Manual feed max. width	241
B	P1 (A4) POSITION	Manual feed P1 position width (A4)	231
C	P2 (A4R) POSITION	Manual feed P2 position width (A4R)	140
D	MIN POSITION	Manual feed min. width	19

## 41

<b>41-1</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operations of the document size sensor and the control circuit.

### Section

#### Operation/Procedure

The operating conditions of the sensors and detectors are displayed.

The sensors and the detectors which are turned ON are highlighted.

OCSW	Document cover status	Open: Normal display Close: Highlighted
PD1 - 7	Document detection sensor status	No document: Normal display Document present: Highlighted

<b>41-2</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the document size sensor detection level.

### Section

#### Operation/Procedure

- 1) Open the document cover, and press [EXECUTE] key without place a document on the document table.  
The sensor level without document is recognized.
- 2) Set A3 (11" x 17") paper on the document table, and press [EXECUTE] key.  
The sensor level when detecting the document is displayed.  
When the above operation is normally completed, it is displayed.

<b>41-3</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operations of the document size sensor and the control circuit.
<b>Section</b>	

#### Operation/Procedure

The detection output level (A/D value) of OCSW and the document sensor (PD1 - PD7) is displayed in real time.

The light receiving range of PD1 - PD7 is 1 - 255. (Default: 128)

Item/Display	Content	Detection level range
OCSW	Original cover SW	0-1 ("1" to Close)
PD1	Document detection 1	0 - 255
PD2	Document detection 2	0 - 255
PD3	Document detection 3	0 - 255
PD4	Document detection 4	0 - 255
PD5	Document detection 5	0 - 255
PD6	Document detection 6	0 - 255
PD7	Document detection 7	0 - 255

43-1	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the fusing temperature in each mode.
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value in step 2) is saved.

**18cpm/20cpm machine**

Item/Display	Content	Setting range	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A HL_UM READY	Ready standby TH_UM set value	70 - 230	150	175	175	165	180	180
B HL_LM READY	Ready standby TH_LM set value	30 - 200	110	110	110	120	120	120
C HL_US READY	Ready standby TH_US set value	70 - 230	150	165	165	165	170	170
D HL_UM PLAIN PAPER BW	Black-White plain paper TH_UM set value	70 - 230	135	160	160	150	165	165
E HL_LM PLAIN PAPER BW	Black-White plain paper TH_LM set value	30 - 200	125	140	140	140	140	140
F HL_US PLAIN PAPER BW	Black-White plain paper TH_US set value	70 - 230	135	155	155	150	160	160
G HL_UM PLAIN PAPER CL	Color plain paper TH_UM set value	70 - 230	145	170	170	160	175	175
H HL_LM PLAIN PAPER CL	Color plain paper TH_LM set value	30 - 200	135	140	140	140	140	140
I HL_US PLAIN PAPER CL	Color plain paper TH_US set value	70 - 230	145	160	160	160	165	165
J WARMUP FUMON HL_US T	Fusing motor pre-rotation start TH_US set value	30 - 200	135	135	135	135	135	135
K WARMUP FUMOFF	Fusing motor previous rotation complete time	0 - 255	30	30	30	30	30	30
L WARM UP END TIME	Warm-up complete time	1 - 255	38	38	38	38	38	38
M HL_UM HEAVY PAPER	Heavy paper TH_UM set value	70 - 230	170	170	170	170	170	170
N HL_LM HEAVY PAPER	Heavy paper TH_LM set value	30 - 200	140	140	140	140	140	140
O HL_US HEAVY PAPER	Heavy paper TH_US set value	70 - 230	170	170	170	170	170	170
P HL_UM OHP PAPER	OHP-TH_UM set value	70 - 230	175	175	175	175	175	175
Q HL_LM OHP PAPER	OHP-TH_LM set value	30 - 200	135	135	135	135	135	135
R HL_US OHP PAPER	OHP-TH_US set value	70 - 230	175	175	175	175	175	175
S HL_UM ENV PAPER	Envelope TH_UM set value	70 - 230	180	170	170	180	170	170
T HL_LM ENV PAPER	Envelope TH_LM set value	30 - 200	145	135	135	145	135	135
U HL_US ENV PAPER	Envelope TH_US set value	70 - 230	180	170	170	180	170	170
V HL_UM GLOSS PAPER	Glossy paper TH_UM set value	70 - 230	180	180	180	180	180	180
W HL_LM GLOSS PAPER	Glossy paper TH_LM set value	30 - 200	140	140	140	140	140	140
X HL_US GLOSS PAPER	Glossy paper TH_US set value	70 - 230	180	180	180	180	180	180
Y HL_UM E-STAR	Preheating TH_UM set value	30 - 200	125	125	125	125	125	125
Z HL_US E-STAR	Preheating TH_US set value	30 - 200	125	125	125	125	125	125
AA HL_UM PRE-JOB	Preheat mode restore complete temperature	30 - 200	130	130	130	130	130	130
AB HL_LM E-STAR	Preheating TH_LM set value	30 - 200	115	115	115	115	115	115
AC HL_UM HEAVY2 PAPER	Heavy paper 2 TH_UM set value	70 - 230	175	175	175	175	175	175
AD HL_LM HEAVY2 PAPER	Heavy paper 2 TH_LM set value	30 - 200	140	140	140	140	140	140
AE HL_US HEAVY2 PAPER	Heavy paper 2 TH_US set value	70 - 230	175	175	175	175	175	175
AF HL_UM WARMUP_120L	TH_UM set value when Warm-Up at 120°C or below	70 - 230	145	170	170	160	175	175
AG HL_LM WARMUP_120L	TH_LM set value when Warm-Up at 120°C or below	30 - 200	110	110	110	110	110	110
AH HL_US WARMUP_120L	TH_US set value when Warm-Up at 120°C or below	70 - 230	135	150	150	150	155	155
AI LO_WARMUP_TIME	AF - AH applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0
AJ HL_UM WARMUP_120H	TH_UM set value when Warm-Up at 120°C or above	70 - 230	145	170	170	160	175	175
AK HL_LM WARMUP_120H	TH_LM set value when Warm-Up at 120°C or above	30 - 200	110	110	110	110	110	110
AL HL_US WARMUP_120H	TH_US set value when Warm-Up at 120°C or above	70 - 230	135	150	150	150	155	155
AM HI_WARMUP_TIME	AJ - AL applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0
AN HI_WU_FM_ON_TMP	FM prior rotation start TH_US when Warm-Up at alpha °C or above	30 - 200	105	105	105	105	105	105
AO HI_WU_END_TIME	Warm-Up completion time when Warm-Up at alpha °C or above	0 - 255	38	38	38	38	38	38
AP HI_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or above	70 - 230	145	170	170	160	175	175
AQ HI_WARMUP_BORDER	Threshold value alpha to which SIM43-1-AN - AP is applied	1 - 119	70	70	70	70	70	70
AR LO_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or below	70 - 230	145	170	170	160	175	175

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
AS	JOBEND_FUMON_TIME	Fusing motor after rotation time after completion of a job (Excluding heavy paper, OPH, and envelopes)	0 - 255	5	5	5	5	5	5
AT	HL_UM_JOB_SET_TMP_B W	Job enable temperature (B/W) when the upper roller temperature is lower than alpha °C	70 - 230	145	170	170	160	175	175

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 23cpm machine

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
A	HL_UM READY	Ready standby TH_UM set value	70 - 230	95	110	110	125	115	125
B	HL_LM READY	Ready standby TH_LM set value	30 - 200	90	105	105	100	115	115
C	HL_US READY	Ready standby TH_US set value	70 - 230	135	140	140	150	145	150
D	HL_UM PLAIN PAPER BW	Black-White plain paper TH_UM set value	70 - 230	125	125	135	140	130	145
E	HL_LM PLAIN PAPER BW	Black-White plain paper TH_LM set value	30 - 200	110	115	115	110	125	125
F	HL_US PLAIN PAPER BW	Black-White plain paper TH_US set value	70 - 230	135	135	140	150	140	150
G	HL_UM PLAIN PAPER CL	Color plain paper TH_UM set value	70 - 230	125	130	135	140	135	145
H	HL_LM PLAIN PAPER CL	Color plain paper TH_LM set value	30 - 200	110	115	115	110	125	125
I	HL_US PLAIN PAPER CL	Color plain paper TH_US set value	70 - 230	135	140	140	150	145	150
J	WARMUP FUMON HL_US T	Fusing motor pre-rotation start TH_US set value	30 - 200	30	30	30	30	30	30
K	WARMUP FUMOFF	Fusing motor previous rotation complete time	0 - 255	20	20	20	20	20	20
L	WARM UP END TIME	Warm-up complete time	1 - 255	16	16	16	16	16	16
M	HL_UM HEAVY PAPER	Heavy paper TH_UM set value	70 - 230	170	170	170	170	170	170
N	HL_LM HEAVY PAPER	Heavy paper TH_LM set value	30 - 200	120	120	120	120	120	120
O	HL_US HEAVY PAPER	Heavy paper TH_US set value	70 - 230	160	160	160	160	160	160
P	HL_UM OHP PAPER	OHP-TH_UM set value	70 - 230	175	175	175	175	175	175
Q	HL_LM OHP PAPER	OHP-TH_LM set value	30 - 200	125	125	125	125	125	125
R	HL_US OHP PAPER	OHP-TH_US set value	70 - 230	175	175	175	175	175	175
S	HL_UM ENV PAPER	Envelope TH_UM set value	70 - 230	175	175	175	175	175	175
T	HL_LM ENV PAPER	Envelope TH_LM set value	30 - 200	125	125	125	125	125	125
U	HL_US ENV PAPER	Envelope TH_US set value	70 - 230	175	175	175	175	175	175
V	HL_UM GLOSS PAPER	Glossy paper TH_UM set value	70 - 230	180	180	180	180	180	180
W	HL_LM GLOSS PAPER	Glossy paper TH_LM set value	30 - 200	120	120	120	120	120	120
X	HL_US GLOSS PAPER	Glossy paper TH_US set value	70 - 230	180	180	180	180	180	180
Y	HL_UM E-STAR	Preheating TH_UM set value	30 - 200	85	105	100	85	105	100
Z	HL_US E-STAR	Preheating TH_US set value	30 - 200	125	135	130	125	135	130
AA	HL_UM PRE-JOB	Preheat mode restore complete temperature	30 - 200	120	125	130	135	130	140
AB	HL_LM E-STAR	Preheating TH_LM set value	30 - 200	70	90	90	70	90	90
AC	HL_UM HEAVY2 PAPER	Heavy paper 2 TH_UM set value	70 - 230	170	170	170	170	170	170
AD	HL_LM HEAVY2 PAPER	Heavy paper 2 TH_LM set value	30 - 200	120	120	120	120	120	120
AE	HL_US HEAVY2 PAPER	Heavy paper 2 TH_SU set value	70 - 230	160	160	160	160	160	160
AF	HL_UM WARMUP_120L	TH_UM set value when Warm-Up at 120°C or below	70 - 230	135	145	145	140	140	145
AG	HL_LM WARMUP_120L	TH_LM set value when Warm-Up at 120°C or below	30 - 200	90	105	105	100	115	115
AH	HL_US WARMUP_120L	TH_US set value when Warm-Up at 120°C or below	70 - 230	125	135	135	135	135	145
AI	LO_WARMUP_TIME	AF - AH applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0
AJ	HL_UM WARMUP_120H	TH_UM set value when Warm-Up at 120°C or above	70 - 230	135	145	145	140	140	145
AK	HL_LM WARMUP_120H	TH_LM set value when Warm-Up at 120°C or above	30 - 200	90	105	105	100	115	115
AL	HL_US WARMUP_120H	TH_US set value when Warm-Up at 120°C or above	70 - 230	125	135	135	135	135	145
AM	HI_WARMUP_TIME	AJ - AL applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
AN	HI_WU_FM_ON_TMP	FM prior rotation start TH_US when Warm-Up at alpha °C or above	30 - 200	30	30	30	30	30	30
AO	HI_WU_END_TIME	Warm-Up completion time when Warm-Up at alpha °C or above	0 - 255	16	16	16	16	16	16
AP	HI_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or above	70 - 230	135	145	145	140	140	145
AQ	HI_WARMUP_BORDER	Threshold value alpha to which SIM43-1-AN - AP is applied	1 - 119	70	70	70	70	70	70
AR	LO_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or below	70 - 230	135	145	145	140	140	145
AS	JOBEND_FUMON_TIME	Fusing motor after rotation time after completion of a job (Excluding heavy paper, OPH, and envelopes)	0 - 255	5	5	5	5	5	5
AT	HL_UM_JOB_SET_TMP_BW	Job enable temperature (B/W) when the upper roller temperature is lower than alpha °C	70 - 230	135	145	145	140	140	145

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 26cpm/31cpm machine

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
A	HL_UM READY	Ready standby TH_UM set value	70 - 230	95	110	110	120	120	125
B	HL_LM READY	Ready standby TH_LM set value	30 - 200	90	105	105	100	115	115
C	HL_US READY	Ready standby TH_US set value	70 - 230	145	150	155	155	160	165
D	HL_UM PLAIN PAPER BW	Black-White plain paper TH_UM set value	70 - 230	125	125	135	130	135	135
E	HL_LM PLAIN PAPER BW	Black-White plain paper TH_LM set value	30 - 200	110	115	115	110	125	125
F	HL_US PLAIN PAPER BW	Black-White plain paper TH_US set value	70 - 230	145	145	155	150	155	160
G	HL_UM PLAIN PAPER CL	Color plain paper TH_UM set value	70 - 230	125	130	135	140	140	145
H	HL_LM PLAIN PAPER CL	Color plain paper TH_LM set value	30 - 200	110	115	115	110	125	125
I	HL_US PLAIN PAPER CL	Color plain paper TH_US set value	70 - 230	145	150	155	155	160	165
J	WARMUP FUMON HL_US T	Fusing motor pre-rotation start TH_US set value	30 - 200	30	30	30	30	30	30
K	WARMUP FUMOFF	Fusing motor previous rotation complete time	0 - 255	20	20	20	20	20	20
L	WARM UP END TIME	Warm-up complete time	1 - 255	16	16	16	16	16	16
M	HL_UM HEAVY PAPER	Heavy paper TH_UM set value	70 - 230	160	160	160	160	160	160
N	HL_LM HEAVY PAPER	Heavy paper TH_LM set value	30 - 200	120	120	120	120	120	120
O	HL_US HEAVY PAPER	Heavy paper TH_US set value	70 - 230	150	150	150	150	150	150
P	HL_UM OHP PAPER	OHP-TH_UM set value	70 - 230	175	175	175	175	175	175
Q	HL_LM OHP PAPER	OHP-TH_LM set value	30 - 200	125	125	125	125	125	125
R	HL_US OHP PAPER	OHP-TH_US set value	70 - 230	175	175	175	175	175	175
S	HL_UM ENV PAPER	Envelope TH_UM set value	70 - 230	175	175	175	175	175	175
T	HL_LM ENV PAPER	Envelope TH_LM set value	30 - 200	125	125	125	125	125	125
U	HL_US ENV PAPER	Envelope TH_US set value	70 - 230	175	175	175	175	175	175
V	HL_UM GLOSS PAPER	Glossy paper TH_UM set value	70 - 230	180	180	180	180	180	180
W	HL_LM GLOSS PAPER	Glossy paper TH_LM set value	30 - 200	120	120	120	120	120	120
X	HL_US GLOSS PAPER	Glossy paper TH_US set value	70 - 230	180	180	180	180	180	180
Y	HL_UM E-STAR	Preheating TH_UM set value	30 - 200	90	105	100	90	105	100
Z	HL_US E-STAR	Preheating TH_US set value	30 - 200	130	135	130	130	135	130
AA	HL_UM PRE-JOB	Preheat mode restore complete temperature	30 - 200	120	125	130	135	135	140
AB	HL_LM E-STAR	Preheating TH_LM set value	30 - 200	70	90	90	70	90	90
AC	HL_UM HEAVY2 PAPER	Heavy paper 2 TH_UM set value	70 - 230	170	170	170	170	170	170
AD	HL_LM HEAVY2 PAPER	Heavy paper 2 TH_LM set value	30 - 200	120	120	120	120	120	120
AE	HL_US HEAVY2 PAPER	Heavy paper 2 TH_US set value	70 - 230	160	160	160	160	160	160
AF	HL_UM WARMUP_120L	TH_UM set value when Warm-Up at 120°C or below	70 - 230	135	140	145	140	140	150

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
AG	HL_LM WARMUP_120L	TH_LM set value when Warm-Up at 120°C or below	30 - 200	90	105	105	100	115	115
AH	HL_US WARMUP_120L	TH_US set value when Warm-Up at 120°C or below	70 - 230	135	140	150	150	140	155
AI	LO_WARMUP_TIME	AF - AH applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0
AJ	HL_UM WARMUP_120H	TH_UM set value when Warm-Up at 120°C or above	70 - 230	135	140	145	140	140	150
AK	HL_LM WARMUP_120H	TH_LM set value when Warm-Up at 120°C or above	30 - 200	90	105	105	100	115	115
AL	HL_US WARMUP_120H	TH_US set value when Warm-Up at 120°C or above	70 - 230	135	140	150	150	140	155
AM	HI_WARMUP_TIME	AJ - AL applying time (Timer from completion of Ready)	0 - 255	0	0	0	0	0	0
AN	HI_WU_FM_ON_TMP	FM prior rotation start TH_US when Warm-Up at alpha °C or above	30 - 200	30	30	30	30	30	30
AO	HI_WU_END_TIME	Warm-Up completion time when Warm-Up at alpha °C or above	0 - 255	16	16	16	16	16	16
AP	HI_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or above	70 - 230	135	140	145	140	140	150
AQ	HI_WARMUP_BORDER	Threshold value alpha to which SIM43-1-AN - AP is applied	1 - 119	70	70	70	70	70	70
AR	LO_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or below	70 - 230	135	140	145	140	140	150
AS	JOBEND_FUMON_TIME	Fusing motor after rotation time after completion of a job (Excluding heavy paper, OPH, and envelopes)	0 - 255	5	5	5	5	5	5
AT	HL_UM_JOB_SET_TMP_BW	Job enable temperature (B/W) when the upper roller temperature is lower than alpha °C	70 - 230	135	140	145	140	140	150

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 36cpm machine

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
A	HL_UM READY	Ready standby TH_UM set value	70 - 230	100	120	125	125	130	140
B	HL_LM READY	Ready standby TH_LM set value	30 - 200	90	105	105	110	115	115
C	HL_US READY	Ready standby TH_US set value	70 - 230	145	155	160	155	170	170
D	HL_UM PLAIN PAPER BW	Black-White plain paper TH_UM set value	70 - 230	125	130	145	130	140	145
E	HL_LM PLAIN PAPER BW	Black-White plain paper TH_LM set value	30 - 200	110	115	115	120	125	125
F	HL_US PLAIN PAPER BW	Black-White plain paper TH_US set value	70 - 230	140	145	160	145	155	160
G	HL_UM PLAIN PAPER CL	Color plain paper TH_UM set value	70 - 230	130	140	150	145	150	160
H	HL_LM PLAIN PAPER CL	Color plain paper TH_LM set value	30 - 200	110	115	115	120	125	125
I	HL_US PLAIN PAPER CL	Color plain paper TH_US set value	70 - 230	145	155	160	155	170	170
J	WARMUP FUMON HL_US T	Fusing motor pre-rotation start TH_US set value	30 - 200	30	30	30	30	30	30
K	WARMUP FUMOFF	Fusing motor previous rotation complete time	0 - 255	20	20	20	20	20	20
L	WARM UP END TIME	Warm-up complete time	1 - 255	16	16	16	16	16	16
M	HL_UM HEAVY PAPER	Heavy paper TH_UM set value	70 - 230	160	160	160	160	160	160
N	HL_LM HEAVY PAPER	Heavy paper TH_LM set value	30 - 200	120	120	120	120	120	120
O	HL_US HEAVY PAPER	Heavy paper TH_US set value	70 - 230	150	150	150	150	150	150
P	HL_UM OHP PAPER	OHP-TH_UM set value	70 - 230	175	175	175	175	175	175
Q	HL_LM OHP PAPER	OHP-TH_LM set value	30 - 200	125	125	125	125	125	125
R	HL_US OHP PAPER	OHP-TH_US set value	70 - 230	175	175	175	175	175	175
S	HL_UM ENV PAPER	Envelope TH_UM set value	70 - 230	175	175	175	175	175	175
T	HL_LM ENV PAPER	Envelope TH_LM set value	30 - 200	125	125	125	125	125	125
U	HL_US ENV PAPER	Envelope TH_US set value	70 - 230	175	175	175	175	175	175
V	HL_UM GLOSS PAPER	Glossy paper TH_UM set value	70 - 230	180	180	180	180	180	180
W	HL_LM GLOSS PAPER	Glossy paper TH_LM set value	30 - 200	120	120	120	120	120	120

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
X	HL_US GLOSS PAPER	Glossy paper TH_US set value	70 - 230	180	180	180	180	180	180
Y	HL_UM E-STAR	Preheating TH_UM set value	30 - 200	100	120	115	100	120	115
Z	HL_US E-STAR	Preheating TH_US set value	30 - 200	145	155	150	145	155	150
AA	HL_UM PRE-JOB	Preheat mode restore complete temperature	30 - 200	135	135	145	140	145	155
AB	HL_LM E-STAR	Preheating TH_LM set value	30 - 200	70	90	90	70	90	90
AC	HL_UM HEAVY2 PAPER	Heavy paper 2 TH_UM set value	70 - 230	170	170	170	170	170	170
AD	HL_LM HEAVY2 PAPER	Heavy paper 2 TH_LM set value	30 - 200	120	120	120	120	120	120
AE	HL_US HEAVY2 PAPER	Heavy paper 2 TH_SU set value	70 - 230	170	170	170	170	170	170
AF	HL_UM WARMUP_120L	TH_UM set value when Warm-Up at 120°C or below	70 - 230	140	150	160	145	160	165
AG	HL_LM WARMUP_120L	TH_LM set value when Warm-Up at 120°C or below	30 - 200	90	105	105	110	115	115
AH	HL_US WARMUP_120L	TH_US set value when Warm-Up at 120°C or below	70 - 230	130	140	160	135	160	165
AI	LO_WARMUP_TIME	AF - AH applying time (Timer from completion of Ready)	0 - 255	10	10	10	10	10	10
AJ	HL_UM WARMUP_120H	TH_UM set value when Warm-Up at 120°C or above	70 - 230	140	150	160	145	160	165
AK	HL_LM WARMUP_120H	TH_LM set value when Warm-Up at 120°C or above	30 - 200	90	105	105	110	115	115
AL	HL_US WARMUP_120H	TH_US set value when Warm-Up at 120°C or above	70 - 230	130	140	160	135	160	165
AM	HI_WARMUP_TIME	AJ - AL applying time (Timer from completion of Ready)	0 - 255	10	10	10	10	10	10
AN	HI_WU_FM_ON_TMP	FM prior rotation start TH_US when Warm-Up at alpha °C or above	30 - 200	30	30	30	30	30	30
AO	HI_WU_END_TIME	Warm-Up completion time when Warm-Up at alpha °C or above	0 - 255	16	16	16	16	16	16
AP	HI_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or above	70 - 230	140	150	160	145	160	165
AQ	HI_WARMUP_BORDER	Threshold value alpha to which SIM43-1-AN - AP is applied	1 - 119	70	70	70	70	70	70
AR	LO_WU_JOB_SET_TMP	Job enable TH_UM temperature when Warm-Up at alpha °C or below	70 - 230	140	150	160	145	160	165
AS	JOBEND_FUMON_TIME	Fusing motor after rotation time after completion of a job (Excluding heavy paper, OPH, and envelopes)	0 - 255	5	5	5	5	5	5
AT	HL_UM_JOB_SET_TMP_BW	Job enable temperature (B/W) when the upper roller temperature is lower than alpha °C	70 - 230	140	150	160	145	160	165

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

43-4	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the fusing temperature 2 in each mode. (Continued from SIM 43-1.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value in step 2) is saved.

#### 18cpm/20cpm machine

Item/Display	Content	Setting range	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A HL_UM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_UM set value	70 - 230	135	160	160	150	165	165
B HL_LM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_LM set value	30 - 200	125	140	140	140	140	140
C HL_US PLAIN PAPER BW DUP	Black-White plain paper duplex TH_US set value	70 - 230	135	155	155	150	155	155
D PLAIN PAPER BW DUP APP CNT	Black and white plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
E HL_UM PLAIN PAPER CL DUP	Color plain paper duplex TH_UM set value	70 - 230	145	170	170	160	175	175
F HL_LM PLAIN PAPER CL DUP	Color plain paper duplex TH_LM set value	30 - 200	135	140	140	140	140	140
G HL_US PLAIN PAPER CL DUP	Color plain paper duplex TH_US set value	70 - 230	145	160	160	160	165	165
H PLAIN PAPER CL DUP APP CNT	Color plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
I HL_UM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170	170
J HL_LM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_LM set value	30 - 200	140	140	140	140	140	140
K HL_US HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_US set value	70 - 230	170	170	170	170	170	170
L HEAVY PAPER BW DUP APP CNT	Black and white heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
M HL_UM HEAVY PAPER CL DUP	Color heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170	170
N HL_LM HEAVY PAPER CL DUP	Color heavy paper duplex TH_LM set value	30 - 200	140	140	140	140	140	140
O HL_US HEAVY PAPER CL DUP	Color heavy paper duplex TH_US set value	70 - 230	170	170	170	170	170	170
P HEAVY PAPER CL DUP APP CNT	Color heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 23cpm machine

Item/Display	Content	Setting range	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A HL_UM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_UM set value	70 - 230	125	135	135	140	140	145
B HL_LM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_LM set value	30 - 200	110	115	115	110	125	125
C HL_US PLAIN PAPER BW DUP	Black-White plain paper duplex TH_US set value	70 - 230	135	145	140	150	150	155
D PLAIN PAPER BW DUP APP CNT	Black and white plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
E HL_UM PLAIN PAPER CL DUP	Color plain paper duplex TH_UM set value	70 - 230	125	135	135	140	140	150
F HL_LM PLAIN PAPER CL DUP	Color plain paper duplex TH_LM set value	30 - 200	110	115	115	110	125	125
G HL_US PLAIN PAPER CL DUP	Color plain paper duplex TH_US set value	70 - 230	135	145	140	150	150	155
H PLAIN PAPER CL DUP APP CNT	Color plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
I HL_UM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170	170

Item/Display	Content	Setting range	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
J	HL_LM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120
K	HL_US HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160
L	HEAVY PAPER BW DUP APP CNT	Black and white heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0
M	HL_UM HEAVY PAPER CL DUP	Color heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170
N	HL_LM HEAVY PAPER CL DUP	Color heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120
O	HL_US HEAVY PAPER CL DUP	Color heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160
P	HEAVY PAPER CL DUP APP CNT	Color heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 26cpm/31cpm machine

Item/Display	Content	Setting range	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A	HL_UM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_UM set value	70 - 230	125	125	135	130	135
B	HL_LM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_LM set value	30 - 200	110	115	115	110	125
C	HL_US PLAIN PAPER BW DUP	Black-White plain paper duplex TH_US set value	70 - 230	145	145	155	150	155
D	PLAIN PAPER BW DUP APP CNT	Black and white plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0
E	HL_UM PLAIN PAPER CL DUP	Color plain paper duplex TH_UM set value	70 - 230	125	130	135	140	145
F	HL_LM PLAIN PAPER CL DUP	Color plain paper duplex TH_LM set value	30 - 200	110	115	115	110	125
G	HL_US PLAIN PAPER CL DUP	Color plain paper duplex TH_US set value	70 - 230	145	150	155	155	165
H	PLAIN PAPER CL DUP APP CNT	Color plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0
I	HL_UM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170
J	HL_LM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120
K	HL_US HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160
L	HEAVY PAPER BW DUP APP CNT	Black and white heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0
M	HL_UM HEAVY PAPER CL DUP	Color heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170
N	HL_LM HEAVY PAPER CL DUP	Color heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120
O	HL_US HEAVY PAPER CL DUP	Color heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160
P	HEAVY PAPER CL DUP APP CNT	Color heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA



### 36cpm machine

Item/Display		Content	Setting range	Default value (SW-A)			Default value (SW-B)		
				Group A	Group B	Group C	Group A	Group B	Group C
A	HL_UM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_UM set value	70 - 230	125	130	145	130	140	145
B	HL_LM PLAIN PAPER BW DUP	Black-White plain paper duplex TH_LM set value	30 - 200	110	115	115	120	125	125
C	HL_US PLAIN PAPER BW DUP	Black-White plain paper duplex TH_US set value	70 - 230	140	145	160	145	155	160
D	PLAIN PAPER BW DUP APP CNT	Black and white plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
E	HL_UM PLAIN PAPER CL DUP	Color plain paper duplex TH_UM set value	70 - 230	130	140	150	145	150	160
F	HL_LM PLAIN PAPER CL DUP	Color plain paper duplex TH_LM set value	30 - 200	110	115	115	120	125	125
G	HL_US PLAIN PAPER CL DUP	Color plain paper duplex TH_US set value	70 - 230	145	155	160	155	170	170
H	PLAIN PAPER CL DUP APP CNT	Color plain paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
I	HL_UM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170	170
J	HL_LM HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120	120
K	HL_US HEAVY PAPER BW DUP	Black-White heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160	160
L	HEAVY PAPER BW DUP APP CNT	Black and white heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0
M	HL_UM HEAVY PAPER CL DUP	Color heavy paper duplex TH_UM set value	70 - 230	170	170	170	170	170	170
N	HL_LM HEAVY PAPER CL DUP	Color heavy paper duplex TH_LM set value	30 - 200	120	120	120	120	120	120
O	HL_US HEAVY PAPER CL DUP	Color heavy paper duplex TH_US set value	70 - 230	160	160	160	160	160	160
P	HEAVY PAPER CL DUP APP CNT	Color heavy paper duplex applying number of sheets	0 - 60	0	0	0	0	0	0

### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for front surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the environmental correction under low temperature and low humidity (L/L) for the fusing temperature setting (SIM 43-1) in each paper mode.
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2) is saved.

Correction value: -49 - +49, Input value: Actually inputted value (1 - 99)

Correction value	-49	-25	-5	0	5	25	49
Input value	1	25	45	50	55	75	99

**18cpm/20cpm machine**

	Item/Display	Content	Setting range	Default value
A	HL_UM READY LL	Correction value for TH_UM set value in Ready standby under LL environment	1 - 99	55
B	HL_LM READY LL	Correction value for TH_LM set value in Ready standby under LL environment	1 - 99	55
C	HL_US READY LL	Correction value for TH_US set value in Ready standby under LL environment	1 - 99	55
D	HL_UM PLAIN BW LL	Correction value for Black-White plain paper TH_UM set value under LL environment	1 - 99	55
E	HL_LM PLAIN BW LL	Correction value for Black-White plain paper TH_LM set value under LL environment	1 - 99	55
F	HL_US PLAIN BW LL	Correction value for Black-White plain paper TH_US set value under LL environment	1 - 99	55
G	HL_UM PLAIN CL LL	Correction value for Color plain paper TH_UM set value under LL environment	1 - 99	55
H	HL_LM PLAIN CL LL	Correction value for Color plain paper TH_LM set value under LL environment	1 - 99	55
I	HL_US PLAIN CL LL	Correction value for Color plain paper TH_US set value under LL environment	1 - 99	55
J	WARMUP FUMON HL_US T LL	Correction value for fusing motor pre-rotation start TH_US set value under LL environment	1 - 99	40
K	WARMUP FUMOFF LL	Fusing motor prior rotation completion time under LL environment	1 - 99	50
L	WARMUP END TIME LL	Correction value for warm-up complete time under LL environment	1 - 99	80
M	HL_UM HEAVY LL	Correction value for heavy paper TH_UM set value under LL environment	1 - 99	55
N	HL_LM HEAVY LL	Correction value for heavy paper TH_LM set value under LL environment	1 - 99	55
O	HL_US HEAVY LL	Correction value for heavy paper TH_US set value under LL environment	1 - 99	55
P	HL_UM OHP LL	Correction value for OHP TH_UM set value under LL environment	1 - 99	55
Q	HL_LM OHP LL	Correction value for OHP TH_LM set value under LL environment	1 - 99	55
R	HL_US OHP LL	Correction value for OHP TH_US set value under LL environment	1 - 99	55
S	HL_UM ENVELOPE LL	Correction value for envelope TH_UM set value under LL environment	1 - 99	55
T	HL_LM ENVELOPE LL	Correction value for envelope TH_LM set value under LL environment	1 - 99	55
U	HL_US ENVELOPE LL	Correction value for envelope TH_US set value under LL environment	1 - 99	55
V	HL_UM GLOSS LL	Correction value for glossy paper TH_UM set value under LL environment	1 - 99	55
W	HL_LM GLOSS LL	Correction value for glossy paper TH_LM set value under LL environment	1 - 99	55
X	HL_US GLOSS LL	Correction value for glossy paper TH_US set value under LL environment	1 - 99	55
Y	HL_UM E-STAR LL	Correction value for preheating TH_UM set value under LL environment	1 - 99	55
Z	HL_US E-STAR LL	Correction value for preheating TH_US set value under LL environment	1 - 99	55
AA	HL_UM PRE-JOB LL	Correction value for the set value of TH_UM when restoring from preheating under LL environment	1 - 99	55
AB	HL_LM E-STAR LL	Correction value for preheating TH_LM set value under LL environment	1 - 99	55
AC	HL_UM HEAVY2 CL LL	Correction value for heavy paper 2 TH_UM set value under LL environment	1 - 99	55
AD	HL_LM HEAVY2 CL LL	Correction value for heavy paper 2 TH_LM set value under LL environment	1 - 99	55
AE	HL_US HEAVY2 CL LL	Correction value for heavy paper 2 TH_US set value under LL environment	1 - 99	55
AF	HL_UM WARMUP_120L LL	Correction value for TH_UM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AG	HL_LM WARMUP_120L LL	Correction value for TH_LM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AH	HL_US WARMUP_120L LL	Correction value for TH_US set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AI	LO_WARMUP_TIME_LL	Correction value for AF-AH applying time (timer from Ready complete) under LL environment	1 - 99	50
AJ	HL_UM WARMUP_120H LL	Correction value for TH_UM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AK	HL_LM WARMUP_120H LL	Correction value for TH_LM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AL	HL_US WARMUP_120H LL	Correction value for TH_US set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AM	HI_WU_TIME_LL	Correction value for AJ-AL applying time (timer from Ready complete) under LL environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_LL	Correction value for FM prior rotation start TH_UM in Warm-Up at alpha °C or above under LL environment	1 - 99	40
AO	HI_WU_END_TIME_LL	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under LL environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or above under LL environment	1 - 99	55
AQ	HI_WARMUP_BORDER_LL	Correction value for the threshold value alpha applying SIM43-1-AN - AP under LL environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or below under LL environment	1 - 99	55
AS	JOBEND_FUMON_TIME_LL	Correction value for the after rotation time when completing a job under LL environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_LL_BW	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under LL environment	1 - 99	55

\* Item WARMUP END TIME LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

\* Item D, F: When B5 size, correction of "-5" is made for item D and item F.

\* Item G, I: When B5 size, correction of "-5" is made for item G and item I.

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

#### 23cpm machine

	Item/Display	Content	Setting range	Default value
A	HL_UM READY LL	Correction value for TH_UM set value in Ready standby under LL environment	1 - 99	55
B	HL_LM READY LL	Correction value for TH_LM set value in Ready standby under LL environment	1 - 99	55
C	HL_US READY LL	Correction value for TH_US set value in Ready standby under LL environment	1 - 99	55
D	HL_UM PLAIN BW LL	Correction value for Black-White plain paper TH_UM set value under LL environment	1 - 99	55
E	HL_LM PLAIN BW LL	Correction value for Black-White plain paper TH_LM set value under LL environment	1 - 99	55
F	HL_US PLAIN BW LL	Correction value for Black-White plain paper TH_US set value under LL environment	1 - 99	55
G	HL_UM PLAIN CL LL	Correction value for Color plain paper TH_UM set value under LL environment	1 - 99	55
H	HL_LM PLAIN CL LL	Correction value for Color plain paper TH_LM set value under LL environment	1 - 99	55
I	HL_US PLAIN CL LL	Correction value for Color plain paper TH_US set value under LL environment	1 - 99	55
J	WARMUP FUMON HL_US T LL	Correction value for fusing motor pre-rotation start TH_US set value under LL environment	1 - 99	40
K	WARMUP FUMOFF LL	Fusing motor prior rotation completion time under LL environment	1 - 99	50
L	WARMUP END TIME LL	Correction value for warm-up complete time under LL environment	1 - 99	80
M	HL_UM HEAVY LL	Correction value for heavy paper TH_UM set value under LL environment	1 - 99	55
N	HL_LM HEAVY LL	Correction value for heavy paper TH_LM set value under LL environment	1 - 99	55
O	HL_US HEAVY LL	Correction value for heavy paper TH_US set value under LL environment	1 - 99	55
P	HL_UM OHP LL	Correction value for OHP TH_UM set value under LL environment	1 - 99	55
Q	HL_LM OHP LL	Correction value for OHP TH_LM set value under LL environment	1 - 99	55
R	HL_US OHP LL	Correction value for OHP TH_US set value under LL environment	1 - 99	55
S	HL_UM ENVELOPE LL	Correction value for envelope TH_UM set value under LL environment	1 - 99	55
T	HL_LM ENVELOPE LL	Correction value for envelope TH_LM set value under LL environment	1 - 99	55
U	HL_US ENVELOPE LL	Correction value for envelope TH_US set value under LL environment	1 - 99	55
V	HL_UM GLOSS LL	Correction value for glossy paper TH_UM set value under LL environment	1 - 99	55
W	HL_LM GLOSS LL	Correction value for glossy paper TH_LM set value under LL environment	1 - 99	55
X	HL_US GLOSS LL	Correction value for glossy paper TH_US set value under LL environment	1 - 99	55
Y	HL_UM E-STAR LL	Correction value for preheating TH_UM set value under LL environment	1 - 99	55
Z	HL_US E-STAR LL	Correction value for preheating TH_US set value under LL environment	1 - 99	55
AA	HL_UM PRE-JOB LL	Correction value for the set value of TH_UM when restoring from preheating under LL environment	1 - 99	55
AB	HL_LM E-STAR LL	Correction value for preheating TH_LM set value under LL environment	1 - 99	55
AC	HL_UM HEAVY2 CL LL	Correction value for heavy paper 2 TH_UM set value under LL environment	1 - 99	55
AD	HL_LM HEAVY2 CL LL	Correction value for heavy paper 2 TH_LM set value under LL environment	1 - 99	55
AE	HL_US HEAVY2 CL LL	Correction value for heavy paper 2 TH_US set value under LL environment	1 - 99	55
AF	HL_UM WARMUP_120L LL	Correction value for TH_UM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AG	HL_LM WARMUP_120L LL	Correction value for TH_LM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AH	HL_US WARMUP_120L LL	Correction value for TH_US set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AI	LO_WARMUP_TIME_LL	Correction value for AF-AH applying time (timer from Ready complete) under LL environment	1 - 99	50
AJ	HL_UM WARMUP_120H LL	Correction value for TH_UM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AK	HL_LM WARMUP_120H LL	Correction value for TH_LM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AL	HL_US WARMUP_120H LL	Correction value for TH_US set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AM	HI_WU_TIME_LL	Correction value for AJ-AL applying time (timer from Ready complete) under LL environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_LL	Correction value for FM prior rotation start TH_UM in Warm-Up at alpha °C or above under LL environment	1 - 99	40
AO	HI_WU_END_TIME_LL	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under LL environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or above under LL environment	1 - 99	55
AQ	HI_WARMUP_BORDER_LL	Correction value for the threshold value alpha applying SIM43-1-AN - AP under LL environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or below under LL environment	1 - 99	55
AS	JOBEND_FUMON_TIME_LL	Correction value for the after rotation time when completing a job under LL environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_LL_BW	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under LL environment	1 - 99	55

\* Item WARMUP END TIME LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

\* Item D, F: When B5 size, correction of "-5" is made for item D and item F.

\* Item G, I: When B5 size, correction of "-5" is made for item G and item I.

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

**26cpm/31cpm machine**

Item/Display		Content	Setting range	Default value
A	HL_UM READY LL	Correction value for TH_UM set value in Ready standby under LL environment	1 - 99	55
B	HL_LM READY LL	Correction value for TH_LM set value in Ready standby under LL environment	1 - 99	55
C	HL_US READY LL	Correction value for TH_US set value in Ready standby under LL environment	1 - 99	55
D	HL_UM PLAIN BW LL	Correction value for Black-White plain paper TH_UM set value under LL environment	1 - 99	55
E	HL_LM PLAIN BW LL	Correction value for Black-White plain paper TH_LM set value under LL environment	1 - 99	55
F	HL_US PLAIN BW LL	Correction value for Black-White plain paper TH_US set value under LL environment	1 - 99	55
G	HL_UM PLAIN CL LL	Correction value for Color plain paper TH_UM set value under LL environment	1 - 99	55
H	HL_LM PLAIN CL LL	Correction value for Color plain paper TH_LM set value under LL environment	1 - 99	55
I	HL_US PLAIN CL LL	Correction value for Color plain paper TH_US set value under LL environment	1 - 99	55
J	WARMUP FUMON HL_US T LL	Correction value for fusing motor pre-rotation start TH_US set value under LL environment	1 - 99	40
K	WARMUP FUMOFF LL	Fusing motor prior rotation completion time under LL environment	1 - 99	50
L	WARMUP END TIME LL	Correction value for warm-up complete time under LL environment	1 - 99	80
M	HL_UM HEAVY LL	Correction value for heavy paper TH_UM set value under LL environment	1 - 99	55
N	HL_LM HEAVY LL	Correction value for heavy paper TH_LM set value under LL environment	1 - 99	55
O	HL_US HEAVY LL	Correction value for heavy paper TH_US set value under LL environment	1 - 99	55
P	HL_UM OHP LL	Correction value for OHP TH_UM set value under LL environment	1 - 99	55
Q	HL_LM OHP LL	Correction value for OHP TH_LM set value under LL environment	1 - 99	55
R	HL_US OHP LL	Correction value for OHP TH_US set value under LL environment	1 - 99	55
S	HL_UM ENVELOPE LL	Correction value for envelope TH_UM set value under LL environment	1 - 99	55
T	HL_LM ENVELOPE LL	Correction value for envelope TH_LM set value under LL environment	1 - 99	55
U	HL_US ENVELOPE LL	Correction value for envelope TH_US set value under LL environment	1 - 99	55
V	HL_UM GLOSS LL	Correction value for glossy paper TH_UM set value under LL environment	1 - 99	55
W	HL_LM GLOSS LL	Correction value for glossy paper TH_LM set value under LL environment	1 - 99	55
X	HL_US GLOSS LL	Correction value for glossy paper TH_US set value under LL environment	1 - 99	55
Y	HL_UM E-STAR LL	Correction value for preheating TH_UM set value under LL environment	1 - 99	55
Z	HL_US E-STAR LL	Correction value for preheating TH_US set value under LL environment	1 - 99	55
AA	HL_UM PRE-JOB LL	Correction value for the set value of TH_UM when restoring from preheating under LL environment	1 - 99	55
AB	HL_LM E-STAR LL	Correction value for preheating TH_LM set value under LL environment	1 - 99	55
AC	HL_UM HEAVY2 CL LL	Correction value for heavy paper 2 TH_UM set value under LL environment	1 - 99	55
AD	HL_LM HEAVY2 CL LL	Correction value for heavy paper 2 TH_LM set value under LL environment	1 - 99	55
AE	HL_US HEAVY2 CL LL	Correction value for heavy paper 2 TH_US set value under LL environment	1 - 99	55
AF	HL_UM WARMUP_120L LL	Correction value for TH_UM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AG	HL_LM WARMUP_120L LL	Correction value for TH_LM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AH	HL_US WARMUP_120L LL	Correction value for TH_US set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AI	LO_WARMUP_TIME_LL	Correction value for AF-AH applying time (timer from Ready complete) under LL environment	1 - 99	50
AJ	HL_UM WARMUP_120H LL	Correction value for TH_UM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AK	HL_LM WARMUP_120H LL	Correction value for TH_LM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AL	HL_US WARMUP_120H LL	Correction value for TH_US set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AM	HI_WU_TIME_LL	Correction value for AJ-AL applying time (timer from Ready complete) under LL environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_LL	Correction value for FM prior rotation start TH_UM in Warm-Up at alpha °C or above under LL environment	1 - 99	40
AO	HI_WU_END_TIME_LL	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under LL environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or above under LL environment	1 - 99	55
AQ	HI_WARMUP_BORDER_LL	Correction value for the threshold value alpha applying SIM43-1-AN - AP under LL environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or below under LL environment	1 - 99	55
AS	JOBEND_FUMON_TIME_LL	Correction value for the after rotation time when completing a job under LL environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_LL_BW	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under LL environment	1 - 99	55

\* Item WARMUP END TIME LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

\* Item D, F: When B5 size, correction of "-5" is made for item D and item F.

\* Item G, I: When B5 size, correction of "-5" is made for item G and item I.

**Code descriptions**

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

**36cpm machine**

	Item/Display	Content	Setting range	Default value
A	HL_UM READY LL	Correction value for TH_UM set value in Ready standby under LL environment	1 - 99	55
B	HL_LM READY LL	Correction value for TH_LM set value in Ready standby under LL environment	1 - 99	55
C	HL_US READY LL	Correction value for TH_US set value in Ready standby under LL environment	1 - 99	55
D	HL_UM PLAIN BW LL	Correction value for Black-White plain paper TH_UM set value under LL environment	1 - 99	55
E	HL_LM PLAIN BW LL	Correction value for Black-White plain paper TH_LM set value under LL environment	1 - 99	55
F	HL_US PLAIN BW LL	Correction value for Black-White plain paper TH_US set value under LL environment	1 - 99	55
G	HL_UM PLAIN CL LL	Correction value for Color plain paper TH_UM set value under LL environment	1 - 99	55
H	HL_LM PLAIN CL LL	Correction value for Color plain paper TH_LM set value under LL environment	1 - 99	55
I	HL_US PLAIN CL LL	Correction value for Color plain paper TH_US set value under LL environment	1 - 99	55
J	WARMUP FUMON HL_US T LL	Correction value for fusing motor pre-rotation start TH_US set value under LL environment	1 - 99	40
K	WARMUP FUMOFF LL	Fusing motor prior rotation completion time under LL environment	1 - 99	50
L	WARMUP END TIME LL	Correction value for warm-up complete time under LL environment	1 - 99	80
M	HL_UM HEAVY LL	Correction value for heavy paper TH_UM set value under LL environment	1 - 99	55
N	HL_LM HEAVY LL	Correction value for heavy paper TH_LM set value under LL environment	1 - 99	55
O	HL_US HEAVY LL	Correction value for heavy paper TH_US set value under LL environment	1 - 99	55
P	HL_UM OHP LL	Correction value for OHP TH_UM set value under LL environment	1 - 99	55
Q	HL_LM OHP LL	Correction value for OHP TH_LM set value under LL environment	1 - 99	55
R	HL_US OHP LL	Correction value for OHP TH_US set value under LL environment	1 - 99	55
S	HL_UM ENVELOPE LL	Correction value for envelope TH_UM set value under LL environment	1 - 99	55
T	HL_LM ENVELOPE LL	Correction value for envelope TH_LM set value under LL environment	1 - 99	55
U	HL_US ENVELOPE LL	Correction value for envelope TH_US set value under LL environment	1 - 99	55
V	HL_UM GLOSS LL	Correction value for glossy paper TH_UM set value under LL environment	1 - 99	55
W	HL_LM GLOSS LL	Correction value for glossy paper TH_LM set value under LL environment	1 - 99	55
X	HL_US GLOSS LL	Correction value for glossy paper TH_US set value under LL environment	1 - 99	55
Y	HL_UM E-STAR LL	Correction value for preheating TH_UM set value under LL environment	1 - 99	55
Z	HL_US E-STAR LL	Correction value for preheating TH_US set value under LL environment	1 - 99	55
AA	HL_UM PRE-JOB LL	Correction value for the set value of TH_UM when restoring from preheating under LL environment	1 - 99	55
AB	HL_LM E-STAR LL	Correction value for preheating TH_LM set value under LL environment	1 - 99	55
AC	HL_UM HEAVY2 CL LL	Correction value for heavy paper 2 TH_UM set value under LL environment	1 - 99	55
AD	HL_LM HEAVY2 CL LL	Correction value for heavy paper 2 TH_LM set value under LL environment	1 - 99	55
AE	HL_US HEAVY2 CL LL	Correction value for heavy paper 2 TH_US set value under LL environment	1 - 99	55
AF	HL_UM WARMUP_120L LL	Correction value for TH_UM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AG	HL_LM WARMUP_120L LL	Correction value for TH_LM set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AH	HL_US WARMUP_120L LL	Correction value for TH_US set value in Warm-Up at 120°C or below under LL environment	1 - 99	55
AI	LO_WARMUP_TIME_LL	Correction value for AF-AH applying time (timer from Ready complete) under LL environment	1 - 99	50
AJ	HL_UM WARMUP_120H LL	Correction value for TH_UM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AK	HL_LM WARMUP_120H LL	Correction value for TH_LM set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AL	HL_US WARMUP_120H LL	Correction value for TH_US set value in Warm-Up at 120°C or above under LL environment	1 - 99	55
AM	HI_WU_TIME_LL	Correction value for AJ-AL applying time (timer from Ready complete) under LL environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_LL	Correction value for FM prior rotation start TH_UM in Warm-Up at alpha °C or above under LL environment	1 - 99	40
AO	HI_WU_END_TIME_LL	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under LL environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or above under LL environment	1 - 99	55
AQ	HI_WARMUP_BORDER_LL	Correction value for the threshold value alpha applying SIM43-1-AN - AP under LL environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_LL	Correction value for Job Enable TH_UM temperature in at alpha °C or below under LL environment	1 - 99	55
AS	JOBEND_FUMON_TIME_LL	Correction value for the after rotation time when completing a job under LL environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_LL_B W	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under LL environment	1 - 99	55

\* Item WARMUP END TIME LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

\* Item D, F: When B5 size, correction of "-5" is made for item D and item F.

\* Item G, I: When B5 size, correction of "-5" is made for item G and item I.

**Code descriptions**

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the environment correction under high temperature and high humidity (H/H) for the fusing temperature setting (SIM 43-1) in each paper mode.
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2 is saved.

Correction value: -49 - +49, Input value: Actually inputted value (1 - 99)

Correction value	-49	-25	-5	0	5	25	49
Input value	1	25	45	50	55	75	99

**18cpm/20cpm machine**

Item/Display		Content	Setting range	Default value
A	HL_UM READY HH	Correction value for TH_UM set value in Ready standby under HH environment	1 - 99	50
B	HL_LM READY HH	Correction value for TH_LM set value in Ready standby under HH environment	1 - 99	50
C	HL_US READY HH	Correction value for TH_US set value in Ready standby under HH environment	1 - 99	50
D	HL_UM PLAIN BW HH	Correction value for Black-White plain paper TH_UM set value under HH environment	1 - 99	50
E	HL_LM PLAIN BW HH	Correction value for Black-White plain paper TH_LM set value under HH environment	1 - 99	50
F	HL_US PLAIN BW HH	Correction value for Black-White plain paper TH_US set value under HH environment	1 - 99	50
G	HL_UM PLAIN CL HH	Correction value for Color plain paper TH_UM set value under HH environment	1 - 99	50
H	HL_LM PLAIN CL HH	Correction value for Color plain paper TH_LM set value under HH environment	1 - 99	50
I	HL_US PLAIN CL HH	Correction value for Color plain paper TH_US set value under HH environment	1 - 99	50
J	WARMUP FUMON HL_US T HH	Correction value for fusing motor pre-rotation start TH_US set value under HH environment	1 - 99	50
K	WARMUP FUMOFF HH	Fusing motor prior rotation completion time under HH environment	1 - 99	50
L	WARMUP END TIME HH	Correction value for warm-up complete time under HH environment	1 - 99	50
M	HL_UM HEAVY HH	Correction value for heavy paper TH_UM set value under HH environment	1 - 99	50
N	HL_LM HEAVY HH	Correction value for heavy paper TH_LM set value under HH environment	1 - 99	50
O	HL_US HEAVY HH	Correction value for heavy paper TH_US set value under HH environment	1 - 99	50
P	HL_UM OHP HH	Correction value for OHP TH_UM set value under HH environment	1 - 99	50
Q	HL_LM OHP HH	Correction value for OHP TH_LM set value under HH environment	1 - 99	50
R	HL_US OHP HH	Correction value for OHP TH_US set value under HH environment	1 - 99	50
S	HL_UM ENVELOPE HH	Correction value for envelope TH_UM set value under HH environment	1 - 99	50
T	HL_LM ENVELOPE HH	Correction value for envelope TH_LM set value under HH environment	1 - 99	50
U	HL_US ENVELOPE HH	Correction value for envelope TH_US set value under HH environment	1 - 99	50
V	HL_UM GLOSS HH	Correction value for glossy paper TH_UM set value under HH environment	1 - 99	50
W	HL_LM GLOSS HH	Correction value for glossy paper TH_LM set value under HH environment	1 - 99	50
X	HL_US GLOSS HH	Correction value for glossy paper TH_US set value under HH environment	1 - 99	50
Y	HL_UM E-STAR HH	Correction value for preheating TH_UM set value under HH environment	1 - 99	50
Z	HL_US E-STAR HH	Correction value for preheating TH_US set value under HH environment	1 - 99	50
AA	HL_UM PRE-JOB HH	Correction value for the set value of TH_UM when restoring from preheating under HH environment	1 - 99	50
AB	HL_LM E-STAR HH	Correction value for preheating TH_LM set value under HH environment	1 - 99	50
AC	HL_UM HEAVY2 CL HH	Correction value for heavy paper 2 TH_UM set value under HH environment	1 - 99	50
AD	HL_LM HEAVY2 CL HH	Correction value for heavy paper 2 TH_LM set value under HH environment	1 - 99	50
AE	HL_US HEAVY2 CL HH	Correction value for heavy paper 2 TH_US set value under HH environment	1 - 99	50
AF	HL_UM WARMUP_120L HH	Correction value for TH_UM set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AG	HL_LM WARMUP_120L HH	Correction value for TH_LM set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AH	HL_US WARMUP_120L HH	Correction value for TH_US set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AI	LO_WARMUP_TIME_HH	Correction value for AF-AH applying time (timer from Ready complete) under HH environment	1 - 99	50
AJ	HL_UM WARMUP_120H HH	Correction value for TH_UM set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AK	HL_LM WARMUP_120H HH	Correction value for TH_LM set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AL	HL_US WARMUP_120H HH	Correction value for TH_US set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AM	HI_WU_TIME_HH	Correction value for AJ-AL applying time (timer from Ready complete) under HH environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_HH	Correction value for FM prior rotation start TH_US in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AO	HI_WU_END_TIME_HH	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AQ	HI_WARMUP_BORDER_HH	Correction value for the threshold value alpha applying SIM43-1-AN - AP under HH environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or below under HH environment	1 - 99	50
AS	JOBEND_FUMON_TIME_LL	Correction value for the after rotation time when completing a job under HH environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_HH_B W	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under HH environment	1 - 99	50

\* Item WARMUP END TIME HH: 1 Count = 1s Change  
Correction value for the other items: 1 count for 1°C change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

#### 23cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM READY HH	Correction value for TH_UM set value in Ready standby under HH environment	1 - 99	50
B	HL_LM READY HH	Correction value for TH_LM set value in Ready standby under HH environment	1 - 99	50
C	HL_US READY HH	Correction value for TH_US set value in Ready standby under HH environment	1 - 99	50
D	HL_UM PLAIN BW HH	Correction value for Black-White plain paper TH_UM set value under HH environment	1 - 99	50
E	HL_LM PLAIN BW HH	Correction value for Black-White plain paper TH_LM set value under HH environment	1 - 99	50
F	HL_US PLAIN BW HH	Correction value for Black-White plain paper TH_US set value under HH environment	1 - 99	50
G	HL_UM PLAIN CL HH	Correction value for Color plain paper TH_UM set value under HH environment	1 - 99	50
H	HL_LM PLAIN CL HH	Correction value for Color plain paper TH_LM set value under HH environment	1 - 99	50
I	HL_US PLAIN CL HH	Correction value for Color plain paper TH_US set value under HH environment	1 - 99	50
J	WARMUP FUMON HL_US T HH	Correction value for fusing motor pre-rotation start TH_US set value under HH environment	1 - 99	50
K	WARMUP FUMOFF HH	Fusing motor prior rotation completion time under HH environment	1 - 99	50
L	WARMUP END TIME HH	Correction value for warm-up complete time under HH environment	1 - 99	50
M	HL_UM HEAVY HH	Correction value for heavy paper TH_UM set value under HH environment	1 - 99	50
N	HL_LM HEAVY HH	Correction value for heavy paper TH_LM set value under HH environment	1 - 99	50
O	HL_US HEAVY HH	Correction value for heavy paper TH_US set value under HH environment	1 - 99	50
P	HL_UM OHP HH	Correction value for OHP TH_UM set value under HH environment	1 - 99	50
Q	HL_LM OHP HH	Correction value for OHP TH_LM set value under HH environment	1 - 99	50
R	HL_US OHP HH	Correction value for OHP TH_US set value under HH environment	1 - 99	50
S	HL_UM ENVELOPE HH	Correction value for envelope TH_UM set value under HH environment	1 - 99	50
T	HL_LM ENVELOPE HH	Correction value for envelope TH_LM set value under HH environment	1 - 99	50
U	HL_US ENVELOPE HH	Correction value for envelope TH_US set value under HH environment	1 - 99	50
V	HL_UM GLOSS HH	Correction value for glossy paper TH_UM set value under HH environment	1 - 99	50
W	HL_LM GLOSS HH	Correction value for glossy paper TH_LM set value under HH environment	1 - 99	50
X	HL_US GLOSS HH	Correction value for glossy paper TH_US set value under HH environment	1 - 99	50
Y	HL_UM E-STAR HH	Correction value for preheating TH_UM set value under HH environment	1 - 99	50
Z	HL_US E-STAR HH	Correction value for preheating TH_US set value under HH environment	1 - 99	50
AA	HL_UM PRE-JOB HH	Correction value for the set value of TH_UM when restoring from preheating under HH environment	1 - 99	50
AB	HL_LM E-STAR HH	Correction value for preheating TH_LM set value under HH environment	1 - 99	50
AC	HL_UM HEAVY2 CL HH	Correction value for heavy paper 2 TH_UM set value under HH environment	1 - 99	50
AD	HL_LM HEAVY2 CL HH	Correction value for heavy paper 2 TH_LM set value under HH environment	1 - 99	50
AE	HL_US HEAVY2 CL HH	Correction value for heavy paper 2 TH_US set value under HH environment	1 - 99	50
AF	HL_UM WARMUP_120L HH	Correction value for TH_UM set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AG	HL_LM WARMUP_120L HH	Correction value for TH_LM set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AH	HL_US WARMUP_120L HH	Correction value for TH_US set value in Warm-Up at 120°C or below under HH environment	1 - 99	50
AI	LO_WARMUP_TIME_HH	Correction value for AF-AH applying time (timer from Ready complete) under HH environment	1 - 99	50
AJ	HL_UM WARMUP_120H HH	Correction value for TH_UM set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AK	HL_LM WARMUP_120H HH	Correction value for TH_LM set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AL	HL_US WARMUP_120H HH	Correction value for TH_US set value in Warm-Up at 120°C or above under HH environment	1 - 99	50
AM	HI_WU_TIME_HH	Correction value for AJ-AL applying time (timer from Ready complete) under HH environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_HH	Correction value for FM prior rotation start TH_US in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AO	HI_WU_END_TIME_HH	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AQ	HI_WARMUP_BORDER_HH	Correction value for the threshold value alpha applying SIM43-1-AN - AP under HH environment	1 - 99	50
AR	LO_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or below under HH environment	1 - 99	50
AS	JOBEND_FUMON_TIME LL	Correction value for the after rotation time when completing a job under HH environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_HH_BW	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under HH environment	1 - 99	50

\* Item WARMUP END TIME HH: 1 Count = 1s Change  
Correction value for the other items: 1 count for 1°C change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

**26cpm/31cpm machine**

Item/Display		Content	Setting range	Default value		
				Group A	Group B	Group C
A	HL_UM READY HH	Correction value for TH_UM set value in Ready standby under HH environment	1 - 99	40	45	50
B	HL_LM READY HH	Correction value for TH_LM set value in Ready standby under HH environment	1 - 99	40	45	50
C	HL_US READY HH	Correction value for TH_US set value in Ready standby under HH environment	1 - 99	40	45	50
D	HL_UM PLAIN BW HH	Correction value for Black-White plain paper TH_UM set value under HH environment	1 - 99	40	45	50
E	HL_LM PLAIN BW HH	Correction value for Black-White plain paper TH_LM set value under HH environment	1 - 99	40	45	50
F	HL_US PLAIN BW HH	Correction value for Black-White plain paper TH_US set value under HH environment	1 - 99	40	45	50
G	HL_UM PLAIN CL HH	Correction value for Color plain paper TH_UM set value under HH environment	1 - 99	40	45	50
H	HL_LM PLAIN CL HH	Correction value for Color plain paper TH_LM set value under HH environment	1 - 99	40	45	50
I	HL_US PLAIN CL HH	Correction value for Color plain paper TH_US set value under HH environment	1 - 99	40	45	50
J	WARMUP FUMON HL_US T HH	Correction value for fusing motor pre-rotation start TH_US set value under HH environment	1 - 99	50	50	50
K	WARMUP FUMOFF HH	Fusing motor prior rotation completion time under HH environment	1 - 99	50	50	50
L	WARMUP END TIME HH	Correction value for warm-up complete time under HH environment	1 - 99	50	50	50
M	HL_UM HEAVY HH	Correction value for heavy paper TH_UM set value under HH environment	1 - 99	50	50	50
N	HL_LM HEAVY HH	Correction value for heavy paper TH_LM set value under HH environment	1 - 99	50	50	50
O	HL_US HEAVY HH	Correction value for heavy paper TH_US set value under HH environment	1 - 99	50	50	50
P	HL_UM OHP HH	Correction value for OHP TH_UM set value under HH environment	1 - 99	50	50	50
Q	HL_LM OHP HH	Correction value for OHP TH_LM set value under HH environment	1 - 99	50	50	50
R	HL_US OHP HH	Correction value for OHP TH_US set value under HH environment	1 - 99	50	50	50
S	HL_UM ENVELOPE HH	Correction value for envelope TH_UM set value under HH environment	1 - 99	50	50	50
T	HL_LM ENVELOPE HH	Correction value for envelope TH_LM set value under HH environment	1 - 99	50	50	50
U	HL_US ENVELOPE HH	Correction value for envelope TH_US set value under HH environment	1 - 99	50	50	50
V	HL_UM GLOSS HH	Correction value for glossy paper TH_UM set value under HH environment	1 - 99	50	50	50
W	HL_LM GLOSS HH	Correction value for glossy paper TH_LM set value under HH environment	1 - 99	50	50	50
X	HL_US GLOSS HH	Correction value for glossy paper TH_US set value under HH environment	1 - 99	50	50	50
Y	HL_UM E-STAR HH	Correction value for preheating TH_UM set value under HH environment	1 - 99	40	45	50
Z	HL_US E-STAR HH	Correction value for preheating TH_US set value under HH environment	1 - 99	40	45	50
AA	HL_UM PRE-JOB HH	Correction value for the set value of TH_UM when restoring from preheating under HH environment	1 - 99	40	45	50
AB	HL_LM E-STAR HH	Correction value for preheating TH_LM set value under HH environment	1 - 99	40	45	50
AC	HL_UM HEAVY2 CL HH	Correction value for heavy paper 2 TH_UM set value under HH environment	1 - 99	50	50	50
AD	HL_LM HEAVY2 CL HH	Correction value for heavy paper 2 TH_LM set value under HH environment	1 - 99	50	50	50
AE	HL_US HEAVY2 CL HH	Correction value for heavy paper 2 TH_US set value under HH environment	1 - 99	50	50	50
AF	HL_UM WARMUP_120L HH	Correction value for TH_UM set value in Warm-Up at 120°C or below under HH environment	1 - 99	40	45	50
AG	HL_LM WARMUP_120L HH	Correction value for TH_LM set value in Warm-Up at 120°C or below under HH environment	1 - 99	40	45	50
AH	HL_US WARMUP_120L HH	Correction value for TH_US set value in Warm-Up at 120°C or below under HH environment	1 - 99	40	45	50
AI	LO_WARMUP_TIME_HH	Correction value for AF-AH applying time (timer from Ready complete) under HH environment	1 - 99	50	50	50
AJ	HL_UM WARMUP_120H HH	Correction value for TH_UM set value in Warm-Up at 120°C or above under HH environment	1 - 99	40	45	50
AK	HL_LM WARMUP_120H HH	Correction value for TH_LM set value in Warm-Up at 120°C or above under HH environment	1 - 99	40	45	50
AL	HL_US WARMUP_120H HH	Correction value for TH_US set value in Warm-Up at 120°C or above under HH environment	1 - 99	40	45	50
AM	HI_WU_TIME_HH	Correction value for AJ-AL applying time (timer from Ready complete) under HH environment	1 - 99	50	50	50
AN	HI_WU_FM_ON_TMP_HH	Correction value for FM prior rotation start TH_US in Warm-Up at alpha °C or above under HH environment	1 - 99	50	50	50
AO	HI_WU_END_TIME_HH	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under HH environment	1 - 99	50	50	50
AP	HI_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or above under HH environment	1 - 99	40	45	50
AQ	HI_WARMUP_BORDER_HH	Correction value for the threshold value alpha applying SIM43-1-AN - AP under HH environment	1 - 99	50	50	50
AR	LO_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or below under HH environment	1 - 99	40	45	50
AS	JOBEND_FUMON_TIME LL	Correction value for the after rotation time when completing a job under HH environment	1 - 99	50	50	50



Item/Display		Content	Setting range	Default value		
				Group A	Group B	Group C
AT	HI_WU_JOB_SET_TMP_HH_B W	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under HH environment	1 - 99	40	45	50

\* Item WARMUP END TIME HH: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

#### List of destination groups

Group	Destination				
Group A	JAPAN	–	–	–	–
Group B	U. S. A	CANADA	INCH	–	–
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

#### 36cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM READY HH	Correction value for TH_UM set value in Ready standby under HH environment	1 - 99	45
B	HL_LM READY HH	Correction value for TH_LM set value in Ready standby under HH environment	1 - 99	45
C	HL_US READY HH	Correction value for TH_US set value in Ready standby under HH environment	1 - 99	45
D	HL_UM PLAIN BW HH	Correction value for Black-White plain paper TH_UM set value under HH environment	1 - 99	45
E	HL_LM PLAIN BW HH	Correction value for Black-White plain paper TH_LM set value under HH environment	1 - 99	45
F	HL_US PLAIN BW HH	Correction value for Black-White plain paper TH_US set value under HH environment	1 - 99	45
G	HL_UM PLAIN CL HH	Correction value for Color plain paper TH_UM set value under HH environment	1 - 99	45
H	HL_LM PLAIN CL HH	Correction value for Color plain paper TH_LM set value under HH environment	1 - 99	45
I	HL_US PLAIN CL HH	Correction value for Color plain paper TH_US set value under HH environment	1 - 99	45
J	WARMUP FUMON HL_US T HH	Correction value for fusing motor pre-rotation start TH_US set value under HH environment	1 - 99	50
K	WARMUP FUMOFF HH	Fusing motor prior rotation completion time under HH environment	1 - 99	50
L	WARMUP END TIME HH	Correction value for warm-up complete time under HH environment	1 - 99	50
M	HL_UM HEAVY HH	Correction value for heavy paper TH_UM set value under HH environment	1 - 99	50
N	HL_LM HEAVY HH	Correction value for heavy paper TH_LM set value under HH environment	1 - 99	50
O	HL_US HEAVY HH	Correction value for heavy paper TH_US set value under HH environment	1 - 99	50
P	HL_UM OHP HH	Correction value for OHP TH_UM set value under HH environment	1 - 99	50
Q	HL_LM OHP HH	Correction value for OHP TH_LM set value under HH environment	1 - 99	50
R	HL_US OHP HH	Correction value for OHP TH_US set value under HH environment	1 - 99	50
S	HL_UM ENVELOPE HH	Correction value for envelope TH_UM set value under HH environment	1 - 99	50
T	HL_LM ENVELOPE HH	Correction value for envelope TH_LM set value under HH environment	1 - 99	50
U	HL_US ENVELOPE HH	Correction value for envelope TH_US set value under HH environment	1 - 99	50
V	HL_UM GLOSS HH	Correction value for glossy paper TH_UM set value under HH environment	1 - 99	50
W	HL_LM GLOSS HH	Correction value for glossy paper TH_LM set value under HH environment	1 - 99	50
X	HL_US GLOSS HH	Correction value for glossy paper TH_US set value under HH environment	1 - 99	50
Y	HL_UM E-STAR HH	Correction value for preheating TH_UM set value under HH environment	1 - 99	45
Z	HL_US E-STAR HH	Correction value for preheating TH_US set value under HH environment	1 - 99	45
AA	HL_UM PRE-JOB HH	Correction value for the set value of TH_UM when restoring from preheating under HH environment	1 - 99	45
AB	HL_LM E-STAR HH	Correction value for preheating TH_LM set value under HH environment	1 - 99	45
AC	HL_UM HEAVY2 CL HH	Correction value for heavy paper 2 TH_UM set value under HH environment	1 - 99	50
AD	HL_LM HEAVY2 CL HH	Correction value for heavy paper 2 TH_LM set value under HH environment	1 - 99	50
AE	HL_US HEAVY2 CL HH	Correction value for heavy paper 2 TH_US set value under HH environment	1 - 99	50
AF	HL_UM WARMUP_120L HH	Correction value for TH_UM set value in Warm-Up at 120°C or below under HH environment	1 - 99	45
AG	HL_LM WARMUP_120L HH	Correction value for TH_LM set value in Warm-Up at 120°C or below under HH environment	1 - 99	45
AH	HL_US WARMUP_120L HH	Correction value for TH_US set value in Warm-Up at 120°C or below under HH environment	1 - 99	45
AI	LO_WARMUP_TIME_HH	Correction value for AF-AH applying time (timer from Ready complete) under HH environment	1 - 99	50
AJ	HL_UM WARMUP_120H HH	Correction value for TH_UM set value in Warm-Up at 120°C or above under HH environment	1 - 99	45
AK	HL_LM WARMUP_120H HH	Correction value for TH_LM set value in Warm-Up at 120°C or above under HH environment	1 - 99	45
AL	HL_US WARMUP_120H HH	Correction value for TH_US set value in Warm-Up at 120°C or above under HH environment	1 - 99	45
AM	HI_WU_TIME_HH	Correction value for AJ-AL applying time (timer from Ready complete) under HH environment	1 - 99	50
AN	HI_WU_FM_ON_TMP_HH	Correction value for FM prior rotation start TH_US in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AO	HI_WU_END_TIME_HH	Correction value for Warm-Up completion time in Warm-Up at alpha °C or above under HH environment	1 - 99	50
AP	HI_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or above under HH environment	1 - 99	45
AQ	HI_WARMUP_BORDER_HH	Correction value for the threshold value alpha applying SIM43-1-AN - AP under HH environment	1 - 99	50

Item/Display		Content	Setting range	Default value
AR	LO_WU_JOB_SET_TMP_HH	Correction value for Job Enable TH_UM temperature in Warm-Up at alpha °C or below under HH environment	1 - 99	45
AS	JOBEND_FUMON_TIME LL	Correction value for the after rotation time when completing a job under HH environment	1 - 99	50
AT	HI_WU_JOB_SET_TMP_HH_B W	Correction value (BW) for Job enable TH_UM temperature when Warm-Up at alpha °C or above under HH environment	1 - 99	45

\* Item WARMUP END TIME HH: 1 Count = 1s Change  
Correction value for the other items: 1 count for 1°C change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

<b>43-22</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the environment correction under low temperature and low humidity (L/L) for the fusing temperature setting (SIM 43-4) in each paper mode.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an item to be set with scroll keys.
  - 2) Enter the set value with 10-key.
  - 3) Press [OK] key.
- The set value in step 2 is saved.

Correction value: -49 - +49, Input value: Actually inputted value (1 - 99)

Correction value	-49	-25	-5	0
Input value	1	25	45	50

#### 18cpm/20cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM PLAIN BW DUP LL	Correction value for upper TH_UM Black-White plain paper duplex under LL environment	1 - 99	55
B	HL_LM PLAIN BW DUP LL	Correction value for lower TH_LM Black-White plain paper duplex under LL environment	1 - 99	55
C	HL_US PLAIN BW DUP LL	Correction value for upper TH_US Black-White plain paper duplex under LL environment	1 - 99	55
D	PLAIN BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White plain paper duplex under LL environment	1 - 99	50
E	HL_UM PLAIN CL DUP LL	Correction value for upper TH_UM Color plain paper duplex under LL environment	1 - 99	55
F	HL_LM PLAIN CL DUP LL	Correction value for lower TH_LM Color plain paper duplex under LL environment	1 - 99	55
G	HL_US PLAIN CL DUP LL	Correction value for upper TH_US Color plain paper duplex under LL environment	1 - 99	55
H	PLAIN CL DUP APP CNT LL	Correction value for applying number of sheets in Color plain paper duplex under LL environment	1 - 99	50
I	HL_UM HEAVY BW DUP LL	Correction value for upper TH_UM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
J	HL_LM HEAVY BW DUP LL	Correction value for lower TH_LM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
K	HL_US HEAVY BW DUP LL	Correction value for upper TH_US set value in Black-White heavy paper duplex under LL environment	1 - 99	55
L	HEAVY BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White heavy paper duplex under LL environment	1 - 99	50
M	HL_UM HEAVY CL DUP LL	Correction value for upper TH_UM set value in Color heavy paper duplex under LL environment	1 - 99	55
N	HL_LM HEAVY CL DUP LL	Correction value for lower TH_LM set value in Color heavy paper duplex under LL environment	1 - 99	55
O	HL_US HEAVY CL DUP LL	Correction value for upper TH_US set value in Color heavy paper duplex under LL environment	1 - 99	55
P	HEAVY CL DUP APP CNT LL	Correction value for applying number of sheets in Color heavy paper duplex under LL environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT LL/ PLAIN CL DUP APP CNT LL: 1 Count = 1s Change  
Correction value for the other items: 1 count for 1°C change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

## 23cpm machine

	Item/Display	Content	Setting range	Default value
A	HL_UM PLAIN BW DUP LL	Correction value for upper TH_UM Black-White plain paper duplex under LL environment	1 - 99	55
B	HL_LM PLAIN BW DUP LL	Correction value for lower TH_LM Black-White plain paper duplex under LL environment	1 - 99	55
C	HL_US PLAIN BW DUP LL	Correction value for upper TH_US Black-White plain paper duplex under LL environment	1 - 99	55
D	PLAIN BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White plain paper duplex under LL environment	1 - 99	50
E	HL_UM PLAIN CL DUP LL	Correction value for upper TH_UM Color plain paper duplex under LL environment	1 - 99	55
F	HL_LM PLAIN CL DUP LL	Correction value for lower TH_LM Color plain paper duplex under LL environment	1 - 99	55
G	HL_US PLAIN CL DUP LL	Correction value for upper TH_US Color plain paper duplex under LL environment	1 - 99	55
H	PLAIN CL DUP APP CNT LL	Correction value for applying number of sheets in Color plain paper duplex under LL environment	1 - 99	50
I	HL_UM HEAVY BW DUP LL	Correction value for upper TH_UM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
J	HL_LM HEAVY BW DUP LL	Correction value for lower TH_LM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
K	HL_US HEAVY BW DUP LL	Correction value for upper TH_US set value in Black-White heavy paper duplex under LL environment	1 - 99	55
L	HEAVY BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White heavy paper duplex under LL environment	1 - 99	50
M	HL_UM HEAVY CL DUP LL	Correction value for upper TH_UM set value in Color heavy paper duplex under LL environment	1 - 99	55
N	HL_LM HEAVY CL DUP LL	Correction value for lower TH_LM set value in Color heavy paper duplex under LL environment	1 - 99	55
O	HL_US HEAVY CL DUP LL	Correction value for upper TH_US set value in Color heavy paper duplex under LL environment	1 - 99	55
P	HEAVY CL DUP APP CNT LL	Correction value for applying number of sheets in Color heavy paper duplex under LL environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT LL/ PLAIN CL DUP APP CNT LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

## 26cpm/31cpm machine

	Item/Display	Content	Setting range	Default value
A	HL_UM PLAIN BW DUP LL	Correction value for upper TH_UM Black-White plain paper duplex under LL environment	1 - 99	55
B	HL_LM PLAIN BW DUP LL	Correction value for lower TH_LM Black-White plain paper duplex under LL environment	1 - 99	55
C	HL_US PLAIN BW DUP LL	Correction value for upper TH_US Black-White plain paper duplex under LL environment	1 - 99	55
D	PLAIN BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White plain paper duplex under LL environment	1 - 99	50
E	HL_UM PLAIN CL DUP LL	Correction value for upper TH_UM Color plain paper duplex under LL environment	1 - 99	55
F	HL_LM PLAIN CL DUP LL	Correction value for lower TH_LM Color plain paper duplex under LL environment	1 - 99	55
G	HL_US PLAIN CL DUP LL	Correction value for upper TH_US Color plain paper duplex under LL environment	1 - 99	55
H	PLAIN CL DUP APP CNT LL	Correction value for applying number of sheets in Color plain paper duplex under LL environment	1 - 99	50
I	HL_UM HEAVY BW DUP LL	Correction value for upper TH_UM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
J	HL_LM HEAVY BW DUP LL	Correction value for lower TH_LM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
K	HL_US HEAVY BW DUP LL	Correction value for upper TH_US set value in Black-White heavy paper duplex under LL environment	1 - 99	55
L	HEAVY BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White heavy paper duplex under LL environment	1 - 99	50
M	HL_UM HEAVY CL DUP LL	Correction value for upper TH_UM set value in Color heavy paper duplex under LL environment	1 - 99	55
N	HL_LM HEAVY CL DUP LL	Correction value for lower TH_LM set value in Color heavy paper duplex under LL environment	1 - 99	55
O	HL_US HEAVY CL DUP LL	Correction value for upper TH_US set value in Color heavy paper duplex under LL environment	1 - 99	55
P	HEAVY CL DUP APP CNT LL	Correction value for applying number of sheets in Color heavy paper duplex under LL environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT LL/ PLAIN CL DUP APP CNT LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

### 36cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM PLAIN BW DUP LL	Correction value for upper TH_UM Black-White plain paper duplex under LL environment	1 - 99	55
B	HL_LM PLAIN BW DUP LL	Correction value for lower TH_LM Black-White plain paper duplex under LL environment	1 - 99	55
C	HL_US PLAIN BW DUP LL	Correction value for upper TH_US Black-White plain paper duplex under LL environment	1 - 99	55
D	PLAIN BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White plain paper duplex under LL environment	1 - 99	50
E	HL_UM PLAIN CL DUP LL	Correction value for upper TH_UM Color plain paper duplex under LL environment	1 - 99	55
F	HL_LM PLAIN CL DUP LL	Correction value for lower TH_LM Color plain paper duplex under LL environment	1 - 99	55
G	HL_US PLAIN CL DUP LL	Correction value for upper TH_US Color plain paper duplex under LL environment	1 - 99	55
H	PLAIN CL DUP APP CNT LL	Correction value for applying number of sheets in Color plain paper duplex under LL environment	1 - 99	50
I	HL_UM HEAVY BW DUP LL	Correction value for upper TH_UM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
J	HL_LM HEAVY BW DUP LL	Correction value for lower TH_LM set value in Black-White heavy paper duplex under LL environment	1 - 99	55
K	HL_US HEAVY BW DUP LL	Correction value for upper TH_US set value in Black-White heavy paper duplex under LL environment	1 - 99	55
L	HEAVY BW DUP APP CNT LL	Correction value for applying number of sheets in Black-White heavy paper duplex under LL environment	1 - 99	50
M	HL_UM HEAVY CL DUP LL	Correction value for upper TH_UM set value in Color heavy paper duplex under LL environment	1 - 99	55
N	HL_LM HEAVY CL DUP LL	Correction value for lower TH_LM set value in Color heavy paper duplex under LL environment	1 - 99	55
O	HL_US HEAVY CL DUP LL	Correction value for upper TH_US set value in Color heavy paper duplex under LL environment	1 - 99	55
P	HEAVY CL DUP APP CNT LL	Correction value for applying number of sheets in Color heavy paper duplex under LL environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT LL/ PLAIN CL DUP APP CNT LL: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the environment correction under high temperature and high humidity (H/H) for the fusing temperature setting (SIM 43-4) in each paper mode.
<b>Section</b>	

**Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2) is saved.

Correction value: -49 - +49, Input value: Actually inputted value (1 - 99)

Correction value	-49	-25	-5	0
Input value	1	25	45	50

**18cpm/20cpm machine**

Item/Display	Content	Setting range	Default value
A HL_UM PLAIN BW DUP HH	Correction value for TH_UM Black-White plain paper duplex mode under HH environment	1 - 99	50
B HL_LM PLAIN BW DUP HH	Correction value for TH_LM Black-White plain paper duplex mode under HH environment	1 - 99	50
C HL_US PLAIN BW DUP HH	Correction value for TH_US Black-White plain paper duplex mode under HH environment	1 - 99	50
D PLAIN BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White plain paper duplex under HH environment	1 - 99	50
E HL_UM PLAIN CL DUP HH	Correction value for TH_UM Color plain paper duplex mode under HH environment	1 - 99	50
F HL_LM PLAIN CL DUP HH	Correction value for TH_LM Color plain paper duplex mode under HH environment	1 - 99	50
G HL_US PLAIN CL DUP HH	Correction value for TH_US Color plain paper duplex mode under HH environment	1 - 99	50
H PLAIN CL DUP APP CNT HH	Correction value for applying number of sheets in Color plain paper duplex under HH environment	1 - 99	50
I HL_UM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
J HL_LM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
K HL_US HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
L HEAVY BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White heavy paper duplex under HH environment	1 - 99	50
M HL_UM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
N HL_LM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
O HL_US HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
P HEAVY CL DUP APP CNT HH	Correction value for applying number of sheets in Color heavy paper duplex under HH environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT HH/ PLAIN CL DUP APP CNT HH: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

**Code descriptions**

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

**23cpm machine**

Item/Display	Content	Setting range	Default value
A HL_UM PLAIN BW DUP HH	Correction value for TH_UM Black-White plain paper duplex mode under HH environment	1 - 99	50
B HL_LM PLAIN BW DUP HH	Correction value for TH_LM Black-White plain paper duplex mode under HH environment	1 - 99	50
C HL_US PLAIN BW DUP HH	Correction value for TH_US Black-White plain paper duplex mode under HH environment	1 - 99	50
D PLAIN BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White plain paper duplex under HH environment	1 - 99	50
E HL_UM PLAIN CL DUP HH	Correction value for TH_UM Color plain paper duplex mode under HH environment	1 - 99	50
F HL_LM PLAIN CL DUP HH	Correction value for TH_LM Color plain paper duplex mode under HH environment	1 - 99	50
G HL_US PLAIN CL DUP HH	Correction value for TH_US Color plain paper duplex mode under HH environment	1 - 99	50
H PLAIN CL DUP APP CNT HH	Correction value for applying number of sheets in Color plain paper duplex under HH environment	1 - 99	50
I HL_UM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
J HL_LM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
K HL_US HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
L HEAVY BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White heavy paper duplex under HH environment	1 - 99	50
M HL_UM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
N HL_LM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
O HL_US HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
P HEAVY CL DUP APP CNT HH	Correction value for applying number of sheets in Color heavy paper duplex under HH environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT HH/ PLAIN CL DUP APP CNT HH: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

## Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

## 26cpm/31cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM PLAIN BW DUP HH	Correction value for TH_UM Black-White plain paper duplex mode under HH environment	1 - 99	50
B	HL_LM PLAIN BW DUP HH	Correction value for TH_LM Black-White plain paper duplex mode under HH environment	1 - 99	50
C	HL_US PLAIN BW DUP HH	Correction value for TH_US Black-White plain paper duplex mode under HH environment	1 - 99	50
D	PLAIN BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White plain paper duplex under HH environment	1 - 99	50
E	HL_UM PLAIN CL DUP HH	Correction value for TH_UM Color plain paper duplex mode under HH environment	1 - 99	50
F	HL_LM PLAIN CL DUP HH	Correction value for TH_LM Color plain paper duplex mode under HH environment	1 - 99	50
G	HL_US PLAIN CL DUP HH	Correction value for TH_US Color plain paper duplex mode under HH environment	1 - 99	50
H	PLAIN CL DUP APP CNT HH	Correction value for applying number of sheets in Color plain paper duplex under HH environment	1 - 99	50
I	HL_UM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
J	HL_LM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
K	HL_US HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
L	HEAVY BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White heavy paper duplex under HH environment	1 - 99	50
M	HL_UM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
N	HL_LM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
O	HL_US HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
P	HEAVY CL DUP APP CNT HH	Correction value for applying number of sheets in Color heavy paper duplex under HH environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT HH/ PLAIN CL DUP APP CNT HH: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

## Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

## 36cpm machine

Item/Display		Content	Setting range	Default value
A	HL_UM PLAIN BW DUP HH	Correction value for TH_UM Black-White plain paper duplex mode under HH environment	1 - 99	50
B	HL_LM PLAIN BW DUP HH	Correction value for TH_LM Black-White plain paper duplex mode under HH environment	1 - 99	50
C	HL_US PLAIN BW DUP HH	Correction value for TH_US Black-White plain paper duplex mode under HH environment	1 - 99	50
D	PLAIN BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White plain paper duplex under HH environment	1 - 99	50
E	HL_UM PLAIN CL DUP HH	Correction value for TH_UM Color plain paper duplex mode under HH environment	1 - 99	50
F	HL_LM PLAIN CL DUP HH	Correction value for TH_LM Color plain paper duplex mode under HH environment	1 - 99	50
G	HL_US PLAIN CL DUP HH	Correction value for TH_US Color plain paper duplex mode under HH environment	1 - 99	50
H	PLAIN CL DUP APP CNT HH	Correction value for applying number of sheets in Color plain paper duplex under HH environment	1 - 99	50
I	HL_UM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
J	HL_LM HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
K	HL_US HEAVY BW DUP HH	Correction value for Black-White heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
L	HEAVY BW DUP APP CNT HH	Correction value for applying number of sheets in Black-White heavy paper duplex under HH environment	1 - 99	50
M	HL_UM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_UM set value under HH environment	1 - 99	50
N	HL_LM HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_LM set value under HH environment	1 - 99	50
O	HL_US HEAVY CL DUP HH	Correction value for Color heavy paper duplex mode TH_US set value under HH environment	1 - 99	50
P	HEAVY CL DUP APP CNT HH	Correction value for applying number of sheets in Color heavy paper duplex under HH environment	1 - 99	50

\* Items PLAIN BW DUP APP CNT HH/ PLAIN CL DUP APP CNT HH: 1 Count = 1s Change

Correction value for the other items: 1 count for 1°C change

## Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the correction of the temperature adjustment value of SIM 43-1 and 43-4.

**Section****Operation/Procedure**

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The set value in step 2 is saved.

Correction value: -49 - +49, Input value: Actually inputted value (1 - 99)

Correction value	-49	-25	-5	0	5	25	49
Input value	1	25	45	50	55	75	99

**18cpm/20cpm machine**

	Item/Display	Content	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A	NN_120_FUS_DUP_HL_UM	Correction value for SIM43-4-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
B	NN_120_FUS_DUP_HL_LM	Correction value for SIM43-4-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
C	LL_120_FUS_DUP_HL_UM	Correction value for SIM43-22-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
D	LL_120_FUS_DUP_HL_LM	Correction value for SIM43-22-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
E	HH_120_FUS_DUP_HL_UM	Correction value for SIM43-23-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
F	HH_120_FUS_DUP_HL_LM	Correction value for SIM43-23-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
G	NN_120_FUS_DUP_CNT	Fusing duplex paper exit count under NN environment	5	5	5	5	5	5
H	LL_120_FUS_DUP_CNT	Fusing duplex paper exit count under LL environment	10	10	10	10	10	10
I	HH_120_FUS_DUP_CNT	Fusing duplex paper exit count under HH environment	5	5	5	5	5	5
J	COOL_DOWN_HEAVY	Cool down time heavy paper	5	5	5	5	5	5
K	COOL_DOWN_OHP	Cool down time OHP	10	10	10	10	10	10
L	COOL_DOWN_ENVELOPE	Cool down time envelope	15	15	15	15	15	15
M	NN_120_FUS_DUP_HL_US	Correction value for SIM43-4-C, G at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
N	LL_120_FUS_DUP_HL_US	Correction value for SIM43-22-C, G at 120°C or below in L/L Warm-Up	50	50	50	50	50	50
O	HH_120_FUS_DUP_HL_US	Correction value for SIM43-23-C, G at 120°C or below in H/H Warm-Up	50	50	50	50	50	50
P	HL_UM THIN PAPER BW	Thin paper BW-TH_UM	130	130	130	130	130	130
Q	HL_LM THIN PAPER BW	Thin paper BW-TH_LM	120	120	120	120	120	120
R	HL_US THIN PAPER BW	Thin paper BW-TH_US	130	130	130	130	130	130
S	HL_UM THIN PAPER CL	Thin paper COL-TH_UM	140	140	140	140	140	140
T	HL_LM THIN PAPER CL	Thin paper COL-TH_LM	130	130	130	130	130	130
U	HL_US THIN PAPER CL	Thin paper COL-TH_US	140	140	140	140	140	140
V	HL_UM THIN PAPER READY	Thin paper Ready-TH_UM	145	145	145	145	145	145
W	HL_UM REC PAPER BW	Recycled paper BW-TH_UM	135	160	160	135	160	160
X	HL_LM REC PAPER BW	Recycled paper BW-TH_LM	125	140	140	125	140	140
Y	HL_US REC PAPER BW	Recycled paper BW-TH_US	135	155	155	135	155	155
Z	HL_UM REC PAPER CL	Recycled paper COL-TH_UM	145	170	170	145	170	170
AA	HL_LM REC PAPER CL	Recycled paper COL-TH_LM	135	140	140	135	140	140
AB	HL_US REC PAPER CL	Recycled paper COL-TH_US	145	160	160	145	160	160
AC	HL_UM REC PAPER READY	Recycled paper Ready-TH_UM	155	180	180	155	180	180

\* Each temperature correction value: 1 count for 1°C change in temperature control

\* Each paper exit count: 1 count = 1 sheet change

\* Each cool down time: 1 count = 1sec change

**Code descriptions**

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

## List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

## 23cpm machine

Item/Display		Content	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A	NN_120_FUS_DUP_HL_UM	Correction value for SIM43-4-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
B	NN_120_FUS_DUP_HL_LM	Correction value for SIM43-4-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
C	LL_120_FUS_DUP_HL_UM	Correction value for SIM43-22-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
D	LL_120_FUS_DUP_HL_LM	Correction value for SIM43-22-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
E	HH_120_FUS_DUP_HL_UM	Correction value for SIM43-23-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
F	HH_120_FUS_DUP_HL_LM	Correction value for SIM43-23-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
G	NN_120_FUS_DUP_CNT	Fusing duplex paper exit count under NN environment	5	5	5	5	5	5
H	LL_120_FUS_DUP_CNT	Fusing duplex paper exit count under LL environment	10	10	10	10	10	10
I	HH_120_FUS_DUP_CNT	Fusing duplex paper exit count under HH environment	5	5	5	5	5	5
J	COOL_DOWN_HEAVY	Cool down time heavy paper	5	5	5	5	5	5
K	COOL_DOWN_OHP	Cool down time OHP	10	10	10	10	10	10
L	COOL_DOWN_ENVELOPE	Cool down time envelope	15	15	15	15	15	15
M	NN_120_FUS_DUP_HL_US	Correction value for SIM43-4-C, G at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
N	LL_120_FUS_DUP_HL_US	Correction value for SIM43-22-C, G at 120°C or below in L/L Warm-Up	50	50	50	50	50	50
O	HH_120_FUS_DUP_HL_US	Correction value for SIM43-23-C, G at 120°C or below in H/H Warm-Up	50	50	50	50	50	50
P	HL_UM THIN PAPER BW	Thin paper BW-TH_UM	115	115	115	115	115	115
Q	HL_LM THIN PAPER BW	Thin paper BW-TH_LM	105	105	105	105	105	105
R	HL_US THIN PAPER BW	Thin paper BW-TH_US	125	125	125	125	125	125
S	HL_UM THIN PAPER CL	Thin paper COL-TH_UM	115	115	115	115	115	115
T	HL_LM THIN PAPER CL	Thin paper COL-TH_LM	105	105	105	105	105	105
U	HL_US THIN PAPER CL	Thin paper COL-TH_US	125	125	125	125	125	125
V	HL_UM THIN PAPER READY	Thin paper Ready-TH_UM	120	120	120	120	120	120
W	HL_UM REC PAPER BW	Recycled paper BW-TH_UM	130	135	135	130	135	135
X	HL_LM REC PAPER BW	Recycled paper BW-TH_LM	110	110	110	110	110	110
Y	HL_US REC PAPER BW	Recycled paper BW-TH_US	135	150	150	135	150	150
Z	HL_UM REC PAPER CL	Recycled paper COL-TH_UM	130	135	135	130	135	135
AA	HL_LM REC PAPER CL	Recycled paper COL-TH_LM	110	110	110	110	110	110
AB	HL_US REC PAPER CL	Recycled paper COL-TH_US	135	150	150	135	150	150
AC	HL_UM REC PAPER READY	Recycled paper Ready-TH_UM	140	145	145	140	145	145

\* Each temperature correction value: 1 count for 1°C change in temperature control

\* Each paper exit count: 1 count = 1 sheet change

\* Each cool down time: 1 count = 1sec change

## Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

## List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA



## 26cpm/31cpm machine

Item/Display		Content	Default value (SW-A)			Default value (SW-B)		
			Group A	Group B	Group C	Group A	Group B	Group C
A	NN_120_FUS_DUP_HL_UM	Correction value for SIM43-4-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
B	NN_120_FUS_DUP_HL_LM	Correction value for SIM43-4-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
C	LL_120_FUS_DUP_HL_UM	Correction value for SIM43-22-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
D	LL_120_FUS_DUP_HL_LM	Correction value for SIM43-22-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
E	HH_120_FUS_DUP_HL_UM	Correction value for SIM43-23-A, E at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
F	HH_120_FUS_DUP_HL_LM	Correction value for SIM43-23-B, F at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
G	NN_120_FUS_DUP_CNT	Fusing duplex paper exit count under NN environment	5	5	5	5	5	5
H	LL_120_FUS_DUP_CNT	Fusing duplex paper exit count under LL environment	10	10	10	10	10	10
I	HH_120_FUS_DUP_CNT	Fusing duplex paper exit count under HH environment	5	5	5	5	5	5
J	COOL_DOWN_HEAVY	Cool down time heavy paper	5	5	5	5	5	5
K	COOL_DOWN_OHP	Cool down time OHP	10	10	10	10	10	10
L	COOL_DOWN_ENVELOPE	Cool down time envelope	15	15	15	15	15	15
M	NN_120_FUS_DUP_HL_US	Correction value for SIM43-4-C, G at 120°C or below in N/N Warm-Up	50	50	50	50	50	50
N	LL_120_FUS_DUP_HL_US	Correction value for SIM43-22-C, G at 120°C or below in L/L Warm-Up	50	50	50	50	50	50
O	HH_120_FUS_DUP_HL_US	Correction value for SIM43-23-C, G at 120°C or below in H/H Warm-Up	50	50	50	50	50	50
P	HL_UM THIN PAPER BW	Thin paper BW-TH_UM	115	115	115	115	115	115
Q	HL_LM THIN PAPER BW	Thin paper BW-TH_LM	105	105	105	105	105	105
R	HL_US THIN PAPER BW	Thin paper BW-TH_US	135	135	135	135	135	135
S	HL_UM THIN PAPER CL	Thin paper COL-TH_UM	115	115	115	115	115	115
T	HL_LM THIN PAPER CL	Thin paper COL-TH_LM	105	105	105	105	105	105
U	HL_US THIN PAPER CL	Thin paper COL-TH_US	135	135	135	135	135	135
V	HL_UM THIN PAPER READY	Thin paper Ready-TH_UM	120	120	120	120	120	120
W	HL_UM REC PAPER BW	Recycled paper BW-TH_UM	130	135	140	130	135	140
X	HL_LM REC PAPER BW	Recycled paper BW-TH_LM	110	110	110	110	110	110
Y	HL_US REC PAPER BW	Recycled paper BW-TH_US	140	155	165	140	155	165
Z	HL_UM REC PAPER CL	Recycled paper COL-TH_UM	130	135	140	130	135	140
AA	HL_LM REC PAPER CL	Recycled paper COL-TH_LM	110	110	110	110	110	110
AB	HL_US REC PAPER CL	Recycled paper COL-TH_US	140	155	165	140	155	165
AC	HL_UM REC PAPER READY	Recycled paper Ready-TH_UM	140	145	150	140	145	150

\* Each temperature correction value: 1 count for 1°C change in temperature control

\* Each paper exit count: 1 count = 1 sheet change

\* Each cool down time: 1 count = 1sec change

### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

### 36cpm machine

Item/Display		Content	Default value		
			Group A	Group B	Group C
A	NN_120_FUS_DUP_HL_UM	Correction value for SIM43-4-A, E at 120°C or below in N/N Warm-Up	50	50	50
B	NN_120_FUS_DUP_HL_LM	Correction value for SIM43-4-B, F at 120°C or below in N/N Warm-Up	50	50	50
C	LL_120_FUS_DUP_HL_UM	Correction value for SIM43-22-A, E at 120°C or below in N/N Warm-Up	50	50	50
D	LL_120_FUS_DUP_HL_LM	Correction value for SIM43-22-B, F at 120°C or below in N/N Warm-Up	50	50	50
E	HH_120_FUS_DUP_HL_UM	Correction value for SIM43-23-A, E at 120°C or below in N/N Warm-Up	50	50	50
F	HH_120_FUS_DUP_HL_LM	Correction value for SIM43-23-B, F at 120°C or below in N/N Warm-Up	50	50	50
G	NN_120_FUS_DUP_CNT	Fusing duplex paper exit count under NN environment	5	5	5
H	LL_120_FUS_DUP_CNT	Fusing duplex paper exit count under LL environment	10	10	10
I	HH_120_FUS_DUP_CNT	Fusing duplex paper exit count under HH environment	5	5	5
J	COOL_DOWN_HEAVY	Cool down time heavy paper	5	5	5
K	COOL_DOWN_OHP	Cool down time OHP	10	10	10
L	COOL_DOWN_ENVELOPE	Cool down time envelope	15	15	15
M	FUSER MOTOR	Web send quantity	10	10	10
N	NN_120_FUS_DUP_HL_US	Correction value for SIM43-4-C, G at 120°C or below in N/N Warm-Up	50	50	50
O	LL_120_FUS_DUP_HL_US	Correction value for SIM43-22-C, G at 120°C or below in L/L Warm-Up	50	50	50
P	HH_120_FUS_DUP_HL_US	Correction value for SIM43-23-C, G at 120°C or below in H/H Warm-Up	50	50	50
Q	HL_UM THIN PAPER BW	Thin paper BW-TH_UM	125	125	125
R	HL_LM THIN PAPER BW	Thin paper BW-TH_LM	105	105	105
S	HL_US THIN PAPER BW	Thin paper BW-TH_US	140	140	140
T	HL_UM THIN PAPER CL	Thin paper COL-TH_UM	125	125	125
U	HL_LM THIN PAPER CL	Thin paper COL-TH_LM	105	105	105
V	HL_US THIN PAPER CL	Thin paper COL-TH_US	140	140	140
W	HL_UM THIN PAPER READY	Thin paper Ready-TH_UM	130	130	130
X	HL_UM REC PAPER BW	Recycled paper BW-TH_UM	130	140	150
Y	HL_LM REC PAPER BW	Recycled paper BW-TH_LM	110	110	110
Z	HL_US REC PAPER BW	Recycled paper BW-TH_US	145	160	170
AA	HL_UM REC PAPER CL	Recycled paper COL-TH_UM	130	140	150
AB	HL_LM REC PAPER CL	Recycled paper COL-TH_LM	110	110	110
AC	HL_US REC PAPER CL	Recycled paper COL-TH_US	145	160	170
AD	HL_UM REC PAPER READY	Recycled paper Ready-TH_UM	140	150	160

\* Each temperature correction value: 1 count for 1°C change in temperature control

\* Each paper exit count: 1 count = 1 sheet change

\* Each cool down time: 1 count = 1sec change

#### Code descriptions

TH_UM	Fusing thermistor main (Front surface of paper)	HL_UM	Heater lamp main (Heat roller for front surface of paper)
TH_LM	Fusing thermistor main (Back surface of paper)	HL_LM	Heater lamp main (Heat roller for back surface of paper)
TH_US	Fusing thermistor sub (Front surface of paper)	HL_US	Heater lamp sub (Heat roller for front surface of paper)

SW-A Setting value when plain paper is selected in the system setting/device setting/fusing control setting.

SW-B Set value when heavy paper is selected in the system setting/device setting/fusing control setting.

The set value displayed in this simulation differs depending on plain paper or heavy paper which is selected in the system setting/device setting/fusing control setting.

(Example) When plain paper is selected in the system setting/device setting/fusing control setting, the value of SW-A is displayed.

#### List of destination groups

Group	Destination				
Group A	JAPAN	—	—	—	—
Group B	U. S. A	CANADA	INCH	—	—
Group C	EUROPE	U. K	AUS.	AB_B	CHINA

43-31

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to check the operation of the fusing web cleaning. (36cpm machine)
<b>Section</b>	Fusing

**Operation/Procedure**

- 1) Press [EXECUTE] key.  
Cleaning the fusing web is performed.
- 2) When cleaning the fusing web is completed, "COMPLETE" is displayed.

**Note**

The set value may be changed for a design change or an individual arrangement. Except for the above cases, however, the set value must not be changed. If it is changed, a trouble may be occur.

Fusing web unit installation detection state	Operation	Remarks
Fusing web unit not installed	Does not operate	* During this operation, the fusing web cleaning feed counter is counted up.
Fusing web unit installed	Operates for the specified time.	

43-32

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set various items related to the forcible operation of web cleaning when job end. (36cpm machine)
<b>Section</b>	Fusing

**Operation/Procedure**

- 1) Select an item to be set with the scroll key.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value in step 2) is saved.

**Note**

The set value may be changed for a design change or an individual arrangement. Except for the above cases, however, the set value must not be changed. If it is changed, a trouble may be occur.

Item/Display	Item	Setting range	Default value
A JOB END COMPACT CHECK	Fusing web motor forcible operation condition when job end	Enable Disable	0 - 1 0 1 1
B JOB END COMPACT INTERVAL	Interval of the print quantity of compulsory action of the fusing web motor at job end	1 - 200	100
C JOB END COMPACT CNT	Number of forcible operations of the fusing web motor when job end	1 - 5	1

44

44-1

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set each correction operation function in the image forming (process) section.
<b>Section</b>	Image process (Photoconductor/Developing/Transfer/Cleaning)

**Operation/Procedure**

- 1) Select an item to be set with the touch panel.  
(The selected item is highlighted.)
- 2) Press [EXECUTE] key. (The set value is saved.)

**Important**

Set the items to the default values unless a change is specially required.

Item/Display	Content	Setting range	Default value	NOTE
HV	Normal operation high density process control Enable/Disable setting	Normal (Disable: 1: NO) Reverse (Enable: 0: YES)	Enable	
HT	Normal operation halftone process control Enable/Disable setting		Enable	
TC	Transfer output correction Enable/Disable setting		Enable	
MD VG	Membrane decrease grid voltage correction Enable/Disable setting		Enable	
MD LD	Membrane laser power voltage correction Enable/Disable setting		Disable	
MD EV	Membrane decrease environment grid voltage correction Enable/Disable setting		Enable	
MD DL	Membrane decrease discharge light quantity correction Enable/Disable setting		Enable	
MD DL EV	Membrane decrease environment discharge light quantity correction Enable/Disable setting		Disable	
TN_PIX_SUP	Setting of Enable/Disable of toner supply control for the yield count		Enable	
TN_FB	Setting of Enable/Disable of the toner density correction for the process control result		Enable	
TN_INT	Setting of Enable/Disable of toner compulsory supply correction for the development traveling distance		Enable	
TN_RECV	Setting of Enable/Disable of the toner density recovery operation		Enable	
TN_ADJ	Setting of Enable/Disable of the toner sensor control voltage adjustment in the process control		Enable	

Item/Display	Content	Setting range	Default value	NOTE
TN_EMP	Setting of Enable/Disable of the toner falling distance detection control	Normal (Disable: 1: NO) Reverse (Enable: 0: YES)	Enable	
TN_EMP_INT	Setting of Enable/Disable of the toner falling distance detection control of job interruption		Enable	
TN_EMP_NEW	Setting of Enable/Disable of the new toner cartridge falling distance detection control		Enable	
TN_PIX_TBL	Setting of Enable/Disable of execution of revision of the yield count conversion table for the toner supply control in the halftone process control		Enable	
AR_AUTO	Auto registration adjustment Enable/Disable setting		Enable	
AR_ERROR	Auto registration adjustment execution error check Enable/Disable setting		Enable	
DM_PHASE	Drum phase fitting Enable/Disable setting		Enable	
PRT_HT	Halftone process control printer correction feedback Enable/Disable setting		Enable	
PTC_ENV	PTC environment correction Enable/Disable setting		Enable	Enable: Correction ON

<b>44-2</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the sensitivity of the image density sensor (registration sensor).
<b>Section</b>	Process
<b>Operation/Procedure</b>	
When [EXECUTE] key is pressed, the adjustment is executed automatically.	
After completion of the adjustment, the adjustment result is displayed.	
If the adjustment is not executed normally, "ERROR" is displayed.	

Classification	Item/Display	Content	Setting range	Default value
PROCON	A PCS_CL LED ADJ	Color image sensor light emitting quantity adjustment value	1 - 255	21
	B PCS_K LED ADJ	Black image sensor light emitting quantity adjustment value	1 - 255	21
	C PCS_CL DARK	Dark voltage of color image sensor	0 - 255	0
	D PCS_K DARK	Dark voltage of black image sensor	0 - 255	0
	E PCS_K GRND	Transfer belt substrate detection level when the item B adjustment is completed	0 - 255	0

Classification	Item/Display	Content	Setting range	Default value
PROCON	F PCS_K BELT MAX	Transfer belt substrate input max. value	0 - 255	0
	G PCS_K BELT MIN	Transfer belt substrate input min. value	0 - 255	0
	H PCS_K BELT DIF	Transfer belt substrate input difference (Item E - Item F)	0 - 255	0
REGIST	I REG_F LED ADJ	Registration sensor light emitting quantity adjustment value F	1 - 255	56
	J REG_F DARK	Registration sensor dark voltage F	0 - 255	0
	K REG_F GRND	Transfer belt substrate detection level when the item I adjustment is completed	0 - 255	0
	L REG_R LED ADJ	Registration sensor light emitting quantity adjustment value R	1 - 255	56
	M REG_R DARK	Registration sensor dark voltage R	0 - 255	0
	N REG_R GRND	Transfer belt substrate detection level when the item J adjustment is completed	0 - 256	0
	O REG_F BELT MAX	Transfer belt substrate detection level max. value (F side)	0 - 255	0
	P REG_F BELT MIN	Transfer belt substrate detection level min. value (F side)	0 - 255	0
	Q REG_F BELT DIF	Transfer belt substrate detection level difference (Item O - Item P)	0 - 255	0
	R REG_R BELT MAX	Transfer belt substrate detection level max. value (R side)	0 - 255	0
	S REG_R BELT MIN	Transfer belt substrate detection level min. value (R side)	0 - 255	0
	T REG_R BELT DIF	Transfer belt substrate detection level difference (Item R - Item S)	0 - 255	0
	U REG_F PATCH (K)	Toner patch detection level F (K) in the registration adjustment	0 - 255	0
	V REG_F PATCH (C)	Toner patch detection level F (C) in the registration adjustment	0 - 255	0
	W REG_F PATCH (M)	Toner patch detection level F (M) in the registration adjustment	0 - 255	0

Classification	Item/Display		Content	Setting range	Default value
REGIST	X	REG_F PATCH (Y)	Toner patch detection level F (Y) in the registration adjustment	0 - 255	0
	Y	REG_R PATCH (K)	Toner patch detection level R (K) in the registration adjustment	0 - 255	0
	Z	REG_R PATCH (C)	Toner patch detection level R (C) in the registration adjustment	0 - 255	0
	AA	REG_R PATCH (M)	Toner patch detection level R (M) in the registration adjustment	0 - 255	0
	AB	REG_R PATCH (Y)	Toner patch detection level R (Y) in the registration adjustment	0 - 255	0

Error name	Error content
Black sensor adjustment abnormality	PCS_K LED ADJ error The target is not reached by 3 times of adjustments.
Color sensor adjustment abnormality	PCS_CL LED ADJ error The target is not reached by 3 times of adjustments.
Substrate scan abnormality	PCS_K GRND error The difference between the max. value and the min. value of the substrate detection level is greater than the specified value when the transfer belt rotates one turn.
Registration sensor F adjustment abnormality	REG_F LED ADJ error The target is not reached by 3 times of adjustments.
Registration sensor R adjustment abnormality	REG_R LED ADJ error The target is not reached by 3 times of adjustments.
Registration substrate F scan abnormality	REG_F GRND error The difference between the max. value and the min. value of the substrate detection level is greater than the specified value when the transfer belt rotates one turn.
Registration substrate R scan abnormality	REG_R GRND error The difference between the max. value and the min. value of the substrate detection level is greater than the specified value when the transfer belt rotates one turn.

<b>44-4</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the conditions of the high density process control operation.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select an item to be set with scroll keys.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

#### Important

Set the items to the default values unless a change is specially required.

Item/Display		Content	Setting range	Default value
A	PCS_CL TARGET	Color image sensor adjustment target value	1 - 255	98
B	PCS_K TARGET	Black image sensor adjustment target value	1 - 255	208
C	LED_CL OUTPUT	Color image sensor light emitting start level	1 - 255	21
D	LED_K OUTPUT	Black image sensor light emitting start level	1 - 255	21
E	PCS ADJUSTMENT LIMIT	Color image sensor adjustment error allowance level	1 - 255	4
F	BELT GROUND DIF	Transfer belt one-turn substrate detection level difference allowance level	1 - 255	1
G	BIAS_CL STANDARD DIF	Developing bias (for color) reference correction voltage	0 - 255	60
H	BIAS_BK STANDARD DIF	Developing bias (for black) reference correction voltage	0 - 255	0
I	BIAS PATCH INTERVAL	Toner patch making developing bias interval	1 - 255	60
J	Y_PAT TARGET ID	Process control target density level (yellow)	1 - 255	111
K	M_PAT TARGET ID	Process control target density level (magenta)	1 - 255	135
L	C_PAT TARGET ID	Process control target density level (cyan)	1 - 255	128
M	K_PAT TARGET ID	Process control target density level (black)	1 - 255	45
N	HV BK_GROUND LIMIT	Black image sensor adjustment error allowance level	1 - 255	60

<b>44-6</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to execute the high density process control forcibly.
<b>Section</b>	Process

#### Operation/Procedure

Press [EXECUTE] key.

In case of a normal completion, the result is saved.

In case of an abnormal completion, "ERROR" is displayed.  
(Refer to the table below.)

In case of an ERROR, the previous correction data are saved.

Result display	Content description
COMPLETE	Normal complete
ERROR	Abnormal end
INTERRUPTION	Forcible interruption

Details of error display	Content description
CL_SEN_ADJ_ERR	Color image sensor adjustment abnormality
BK_SEN_ADJ_ERR	Black image sensor adjustment abnormality
K_HV_ERR	K high density process control abnormality
C_HV_ERR	C high density process control abnormality
M_HV_ERR	M high density process control abnormality
Y_HV_ERR	Y high density process control abnormality
TIMEOUT_ERR	Time out

<b>Purpose</b>	Operation data display
<b>Function (Purpose)</b>	Used to display the result data of the high density process control operation.
<b>Section</b>	Image process (Photoconductor/Developing/Transfer/Cleaning)

**Operation/Procedure**

Select a target display mode with [CPY/PRN], [OTHER] keys.

Mode	Item/Display (*: Correction value)		Content	Display range	Default value
CPY/PRN	P (PROCON)	BLACK : GB ***/*** DV ***/***	High density process control mode GB/DV data (KCMY) (Output voltage level/base voltage level)	GB: 150 - 850 DV: 0 - 600	GB: 630 DV: 430
		CYAN : GB ***/*** DV ***/***			
		MAGENTA : GB ***/*** DV ***/***			
		YELLOW : GB ***/*** DV ***/***			
	N(M) (NORMAL (MIDDLE))	BLACK : GB ***/*** DV ***/***	Medium speed print mode GB/DV data (KCMY) (Actual output voltage level/base voltage level)	GB: 150 - 850 DV: 0 - 600	GB: 630 DV: 430
		CYAN : GB ***/*** DV ***/***			
		MAGENTA : GB ***/*** DV ***/***			
		YELLOW : GB ***/*** DV ***/***			
	N(L) (NORMAL (LOW))	BLACK : GB ***/*** DV ***/***	Low speed print mode GB/DV data (KCMY) (Actual output voltage level/base voltage level)	GB: 150 - 850 DV: 0 - 600	GB: 600 DV: 400
		CYAN : GB ***/*** DV ***/***			
		MAGENTA : GB ***/*** DV ***/***			
		YELLOW : GB ***/*** DV ***/***			
OTHER	TN/TC	TN HUD AREA	Toner density correction humidity area	1 - 8	4
		TN HUD DATA	Toner density correction humidity AD value	0 - 1023	0
		TC TMP AREA	Transfer correction temperature area	1 - 9	4
		TC TMP DATA	Transfer correction temperature AD value	0 - 1023	0
		TC HUD AREA	Transfer correction humidity area	1 - 9	4
		TC HUD DATA	Transfer correction humidity AD value	0 - 1023	0
		MD HUD AREA	Membrane decrease correction humidity area	1 - 8	4
		MD HUD DATA	Membrane decrease correction humidity AD value	0 - 1023	0
	DRUM	MD K STEP	Drum membrane decrease correction STEP level (KCMY)	0 - 4	0
		MD C STEP			
		MD M STEP			
		MD Y STEP			
		MD K DRUM COUNTER	Membrane decrease drum traveling distance area (KCMY)	0 - 20	0
		MD C DRUM COUNTER			
		MD M DRUM COUNTER			
		MD Y DRUM COUNTER			
	LIFE	MD K REVISE(LIFE) : L *** M ***	MC grid correction voltage level (for the drum membrane decrease) (KCMY)	0 - 255	0
		MD C REVISE(LIFE) : L *** M ***			
		MD M REVISE(LIFE) : L *** M ***			
		MD Y REVISE(LIFE) : L *** M ***			
	EV	MD K REVISE(EV) : L *** M ***	MC grid voltage correction level (for the environment) (KCMY)	0 - 255	0
		MD C REVISE(EV) : L *** M ***			
		MD M REVISE(EV) : L *** M ***			
		MD Y REVISE(EV) : L *** M ***			
	ALL	MD K REVISE(ALL) : L *** M ***	MC grid voltage correction level (for the drum membrane decrease) (KCMY)	0 - 255	0
		MD C REVISE(ALL) : L *** M ***			
		MD M REVISE(ALL) : L *** M ***			
		MD Y REVISE(ALL) : L *** M ***			
	LD	MD K REVISE(LD) : L *** M ***	Laser power correction level (for the drum membrane decrease) (KCMY)	0 - 255	0
		MD C REVISE(LD) : L *** M ***			
		MD M REVISE(LD) : L *** M ***			
		MD Y REVISE(LD) : L *** M ***			
	DL	MD K REVISE COL (DL) : L *** M ***	Discharge lamp correction level (%) (for the drum membrane decrease)	0 - 100	70
		MD C REVISE COL (DL) : L *** M ***			
		MD M REVISE COL (DL) : L *** M ***			
		MD Y REVISE COL (DL) : L *** M ***			
	DL EV	MD K REVISE COL (DL EV) : L *** M ***	Discharge lamp correction level (%) (for the environment)	-100 - 100	0
		MD C REVISE COL (DL EV) : L *** M ***			
		MD M REVISE COL (DL EV) : L *** M ***			
		MD Y REVISE COL (DL EV) : L *** M ***			

Mode	Item/Display (*: Correction value)		Content	Display range	Default value
OTHER	CRUM	DESTINATION	CRUM destination (Main unit data)	-	-
		MODEL TYPE	Machine model type	0 - 1	0
		CRUM DEST_K	CRUM destination (CRUM data)	-	-
		CRUM DEST_C			
		CRUM DEST_M			
		CRUM DEST_Y			
	CNT	PROCON COUNT HV	High density process control number of executions	0 - 99999999	0
		PROCON COUNT HT	Halftone process control number of executions	0 - 99999999	0

#### 44-12

**Purpose** Operation data display

**Function (Purpose)** Used to display the operation data of the high density process control and the image density sensor (registration sensor).

**Section** Image process (Photoconductor/Developing)

#### Operation/Procedure

Select a display mode with [TARGET] [PATCH] keys.

Mode	Item/Display	Content	Display range	Default value
TARGET	CARB DATA	Standard reflection plate detection level	0 - 255	108
	SEAL ADJ DATA	Jig patch seal detection level when executing SIM 44-13	1 - 255	108
	ADK_SL (K)	Development characteristics gradient coefficient (High density process control operation)	-9.99 - 9.99	0
	ADK_INT(K)	Development characteristics intercept level (High density process control operation 0V)	-999.9 - 999.9	0
	TARGET (K)	High density process control target density level (K)	0.00 - 255.00	0
	TARGET (C/M/Y)	High density process control target density level (C/M/Y)	0.00 - 255.00	0
PATCH	n-1	High density process control nth time toner patch density level 1 (n=1-5)	0 - 255	0
	n-2	Toner patch data nth time patch 2 (n=1-5)	0 - 255	0
	n-3	Toner patch data nth time patch 3 (n=1-5)	0 - 255	0
	n-4	Toner patch data nth time patch 4 (n=1-5) • BK only	0 - 255	0
	n-5	Toner patch data nth time patch 5 (n=1-5) • BK only	0 - 255	0
PATCH	n-1	Toner patch data nth time patch 1 (n=6-10)	0 - 255	0
	n-2	Toner patch data nth time patch 2 (n=6-10)	0 - 255	0
	n-3	Toner patch data nth time patch 3 (n=6-10)	0 - 255	0
	n-4	Toner patch data nth time patch 4 (n=6-10) • BK only	0 - 255	0
	n-5	Toner patch data nth time patch 5 (n=6-10) • BK only	0 - 255	0

#### 44-13

**Purpose** Adjustment/Setup

**Function (Purpose)** Used to perform the color image sensor (image registration sensor F) calibration.

#### Section

#### Operation/Procedure

- 1) Remove the BK developing unit, the BK OPC drum unit, and the primary transfer unit. Attach the calibration jig.
- 2) Press [EXECUTE] key.  
Calibration is performed, and the data are displayed.
- 3) Install the BK developing unit, the BK OPC drum unit, and the primary transfer unit.
- 4) Press [EXECUTE] key.

	Item/Display	Content	Setting range	Default value
A	PCS_CL CARB OUT	Calibration plate sensor value	1 - 255	108
B	PCS_CL LED ADJ	Color sensor light emitting quantity adjustment value	1 - 255	21

Error display	Content
SEN ADJ ERR	Color image sensor sensitivity adjustment abnormality
SHUTTER CLOSE ERR	Primary transfer operation abnormality
ERROR	Compulsory stop

#### 44-14

**Purpose** Operation data display

**Function (Purpose)** Used to display the output level of the temperature and humidity sensor.

**Section** Process (OPC drum, development)/Fusing/LSU

#### Operation/Procedure

The output levels of the fusing temperature sensor, the machine temperature sensor, and the humidity sensor are displayed.

Item/Display	Content	Display range
TH_UM	Fusing main thermistor differential input level (°C) / (AD value)	Temperature: 0 - 255°C (±1°C) AD value: 0-1023
TH_UM_AD1	Fusing thermistor detection level for compensation (°C) / (AD value)	Temperature: 0.0-255.0°C (±0.2°C) AD value: 0-1023
TH_UM_AD2	Fusing thermistor detection level (AD value)	AD value: 0-1023
TH_LM	Fusing thermistor A/D value (temperature °C) (Fusing roller B edge)	Temperature: 0 - 255°C (±1°C) AD value: 0-1023
TH_US	Fusing sub thermistor A/D value (temperature °C) (Fusing belt)	Temperature: 0 - 255°C (±1°C) AD value: 0-1023
TEMPRATURE	Process control thermistor detection level	Temperature: -40.0 - 60.0°C (±0.1°C) AD value: 0-1023

Item/Display	Content	Display range
HUMIDITY	Process control humidity sensor detection level	Humidity: 5.0-90.0% ( $\pm 0.1\%$ ), AD value: 0-1023
TH1_LSU	LSU thermistor detection level (A/D value) ( $^{\circ}\text{C}$ )	Temperature: 5.0-60.0 $^{\circ}\text{C}$ ( $\pm 0.1^{\circ}\text{C}$ ) AD value: 0-255

44-15

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the OPC drum idle rotation.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select an item to be set with the scroll key.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The initial value must be set unless any special change is required.

Item/Display	Content	Setting range	Default value
A TIME	Idle rotation interval (time interval between the previous OPC drum idle rotation and the next one) setting (h)	0 - 255	6
B AREA1	Environmental area difference judgment threshold value setting (difference between the previous OPC drum idle rotation and the current one)	0 - 5	2
C AREA2	Environmental area conditions (AND condition of the previous OPC drum idle rotation and the current one)	1 - 15	1
D CYCLE	Previous rotation time setting (sec) in the process control when recovered from power ON, preheating/sleep mode.	0 - 255	0

The execution YES/NO of the OPC drum idle rotation is determined by the AND condition of TIME, AREA1, and AREA 2.

To execute the OPC drum idle rotation, set item B (AREA 1) to "0," and item C (AREA2) to "15."

However, idle rotation is performed in a certain interval while in shut off. This must be fully explained to the user.

44-21

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the halftone process control target.
<b>Section</b>	Process

#### Operation/Procedure

Press [EXECUTE] key.

The halftone process control target is set and the operation data are displayed.

Display	Content
COMPLETE	Normal complete
ERROR COLOR SENSOR ADJUSTMENT	Color image density sensor sensitivity adjustment error
ERROR BLACK SENSOR ADJUSTMENT	Black image density sensor sensitivity adjustment error
[YMCK]	High density process control error [YMCK]
OTHER	Other errors

44-22

<b>Purpose</b>	Operation data display
<b>Function (Purpose)</b>	Used to display the toner patch density level in the halftone process control operation.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select the display mode with [1ST STEP],[2ND STEP] key.  
The toner patch density level made in the halftone process control operation is displayed.

Item/Display	Content
ID_n	Patch data display (PTK: n = 1 - 24, PTC/PTM/PTY: n = 1 - 16)
BASE1	Belt substrate data (START)
BASE5	Belt substrate data (LAST)

44-24

<b>Purpose</b>	Operation data display
<b>Function (Purpose)</b>	Used to display the correction target and the correction level in the halftone process control operation.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select the display category with [NEXT] key.
- 2) Select a target adjustment color with [K] [C] [M] [Y] key.

Category	Item/Display	Content
Coefficient	[EX-LOW]	Coefficient of the approximation formula of the minimum density
	[LOW]	Coefficient of the approximation formula of the low density
	[CONNECT]	Coefficient of the approximation formula of when connecting the low density and the medium density
	[MID]	Coefficient of the approximation formula of the medium density
	[HIGH]	Coefficient of the approximation formula of the high density
	[CONNECT POINT]	Each density section connection output ratio
Reference value	[SENSOR_TARGET]	Halftone process control reference value
Correction value	[S_VALUE]	Halftone process control correction value
For printer	[PRINTER_S_VALUE]	Printer halftone process control correction value
	[PRINTER_BASE_DITHER_VALUE]	Printer halftone process control reference dither value
	[PRINTER_AUTO_HT_VALUE]	Printer auto density adjustment correction value
Previous correction value	[BEFORE S_VALUE]	Previous halftone process control value



<b>44-25</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the calculating conditions of the correction value for the halftone process control.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select a target adjustment color with [K] [C] [M] [Y] key.
- 2) Select a target adjustment density level with scroll key on the touch panel.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key.

#### Important

Set the items to the default values unless a change is specially required.

Item/Display		Content	Setting range	Default value	
				K	CMY
A	LOW FIELD LOWER LIMIT	Low density approximate expression data lower limit value	0 - 255	98	2
B	LOW FIELD UPPER LIMIT	Low density approximate expression data upper limit value	0 - 255	60	40
C	MID FIELD LOWER LIMIT	Medium density approximate expression data lower limit value	0 - 255	90	15
D	MID FIELD UPPER LIMIT	Medium density approximate expression data upper limit value	0 - 255	6	144
E	HIGHLIGHT POINT	Reference point of the highlight correction amount	1 - 8	7	7
F	HIGHTLIGHT VALUE LIMIT	Highlight correction amount limit value	0 - 128	20	20
G	MAX VALUE LIMIT	Maximum density value correction limit value	0 - 128	20	20

<b>44-26</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to execute the halftone process control compulsory.
<b>Section</b>	Process

#### Operation/Procedure

Press [EXECUTE] key.

The halftone process control is performed and the operation data are displayed.

COMPLETE	Normal complete
ERROR COLOR SENSOR ADJUSTMENT	Color image density sensor sensitivity adjustment error
ERROR BLACK SENSOR ADJUSTMENT	Black image density sensor sensitivity adjustment error
[YMCK]	High density process control error [YMCK] error
OTHER	Other errors

<b>44-27</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the correction data of the halftone process control.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

The correction data of the halftone process control are cleared.

<b>44-28</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the process control execution conditions.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select a target item of setting with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

#### Important

Set the items to the default values unless a change is specially required.

Mode	Item/Display			Content	Setting range			Default value
Process control Enable/Disable setting	A	INITIAL	YES	When warm-up after clearing the counter of the OPC drum and the developer unit	Enable	0 - 1	0	0
			NO		Disable		1	
	B	SW ON		When supplying the power (when canceling power shut-off)	Color process control Enable	0 - 3	0	3
					Process control Disable		1	
					BK process control Enable		2	
					Pixel count judgment		3	
	C	TIME		After passing the specified time from leaving READY continuously (Time can be changed by INTERVAL TIME)	Color process control Enable	0 - 3	0	3
					Process control Disable		1	
					BK process control Enable		2	
					Pixel count judgment		3	
	D	HUM_LIMIT		HUM judgment is made when turning ON the power and after passing INTERVAL TIME.	Color process control Enable	0 - 2	0	0
					Process control Disable		1	
					BK process control Enable		2	
	E	HUM		The temperature and humidity inside the machine are monitored only during a job at the interval set by the item of HUM HOUR. When the changes in the temperature and the humidity are greater than the specified level (the set value of item HUM DIF) in comparison with the previous process control.	Color process control Enable	0 - 2	0	0
					Process control Disable		1	
					BK process control Enable		2	
	F	REV1	YES	When the accumulated traveling distance of K or M OPC drum unit reaches the specified level after turning ON the power.	Enable	0 - 1	0	0
			NO		Inhibit		1	
	G	REV2_BK	YES	When the accumulated traveling distance of K OPC drum unit reaches the specified level from execution of the previous density correction.	Enable	0 - 1	0	0
			NO		Inhibit		1	
	H	REV2_CL	YES	When the accumulated traveling distance of M OPC drum unit reaches the specified level from execution of the previous density correction.	Enable	0 - 1	0	0
			NO		Inhibit		1	
	I	REFRESH MODE	YES	Select of YES/NO of the manual process control key with key operation	Key operation display	0 - 1	0	1
			NO		Key operation NO display		1	
Setting of the execution conditions of the process control	J	DAY	When there is no color job from when the previous color process control was performed to when the number of days set by this item setting, perform the process control when executing the next warming up.	0: Disable of the specified days judgment	0 - 999	0	1	
				1 - 999: 1 - 999 days passing		999		
	K	HI-COV		Setting of the execution conditions of the process control for the print ratio	The process control is performed by considering the average print ratio of every 10 pages as the judgment criteria.	0 - 2	0	0
					Print ratio judgment inhibit (The process control for the target of print ratio is not performed.)		1	
					The process control is performed by considering the average print ratio of 30 pages as the judgment criteria in a continuous print job of 30 or more pages.		2	

Mode	Item/Display		Content		Setting range		Default value
Setting of the execution conditions of the process control	L	LO-COV	Setting of the execution judgment of the process control in continuous printing of low print ratio images	Enable	0 - 1	0	0
				Inhibit		1	
	M	TonerCA-END	Setting of the process control interval reduction when the toner cartridge remaining quantity is 25% or less (If this is set to Enable, item M RATIO is changed.)	Enable	0 - 1	0	1
				Inhibit		1	
	N	AVERAGE-PAGE	Setting of the number of pages of item HI-COV set value 2	1: 10 pages - 5: 50 pages 1 step corresponds to 10 pages.	1 - 5	1	3
						5	
	O	LIMIT PAGE	Setting of the number of connected jobs of the process control and of the limit number of the process control A number of reservation jobs are connected. When the number of jobs exceeds the specified number of pages (the set value of this setting), the process control is performed. / The process control is performed by AND conditions of item REV condition and the specified number of pages (the set value of this setting).	1: 10 pages - 10: 100 pages 1 step corresponds to 10 pages.	1 - 10	1	10
						10	
	P	PIX_RATIO_BK	Magnification ratio setting (%) of the BK toner count specified value The set value of 100 corresponds to K print of A4 at the print ratio of 5%.		1 - 999		10
	Q	PIX_RATIO_CL	Magnification ratio setting (%) of the color (CMY) toner count specified value The set value of 100 corresponds to K print of A4 at the print ratio of 5%.		1 - 999		10
	R	INTERVAL TIME	Setting of the leaving time when turning ON the power (including the sleep recovery time) (h: hour)		1 - 255		3
	S	HUM HOUR	Interval setting of the temperature and humidity monitoring time of "HUM" (unit: 10 minutes)		1 - 24		2
	T	HUM_DIF	The specified value of the area difference in humidity between the level at execution of the previous control and the current humidity (Applied to item HUM)		1 - 9		2
	U	BK_RATIO	Magnification ratio setting (%) of the specified value of the BK OPC drum traveling distance of "REV2_BK"		1 - 999 (Entry of 20 corresponds to 100,000mm.)		15
	V	M_RATIO	Magnification ratio setting (%) of the M OPC drum traveling distance of "REV2_CL"		1 - 999 (Entry of 20 corresponds to 100,000mm.)		15
Setting of the execution condition of the registration adjustment	W	COLOR BORDER	Judgment criteria whether the BK high density process control is individually performed or not (Setting of the ratio of the M OPC drum rotation distance for the K OPC drum rotation distance (%))	0: The BK process control is executed regardless of the M OPC drum traveling distance. 1 - 999: 1 - 999(%)	0 - 999		20
	X	BK ONLY	Setting of the frequency of execution of the 4-color high density process control when only monochrome output is continued (The result of this setting is applied only when the M OPC drum rotation distance is smaller than the set value of COLOR BORDER.)	Frequency of once for 5 times Frequency of once for 1 - 5 times The 4-color high density process control is always performed.	0 - 6	0	5
						1 - 5	
						6	
	Y	HT_DIF	HT process control execution judgment developing bias variation value		1 - 255		40
	Z	RG_ON_SYNC	CL ALL CL/BK	Setting of execution of the registration adjustment when executing the process control when turning ON the power	When the color process control is executed.	0	0
					Executed regardless of the process control.	1	
					When the color process control and the K process control are executed.	2	
	AA	RG_TEMP_TIMER	Time interval from registration adjustment after turning ON the power to the next execution.		0 - 240 (MINUTE)		0
	AB	RG_PERM_TIMER	Setting of inhibit time of execution of the registration adjustment		0 - 15 (HOUR)		1
	AC	RG_HOUR_TIMER	Setting of the interval time of execution of the registration adjustment		0 - 15 (Above)+(HOUR)		5
	AD	RG_BW_SYNC	Setting of Enable/Disable of the registration adjustment after a monochrome job	Enable Inhibit	0 - 1	0	1
						1	

Mode	Item/Display		Content	Setting range	Default value
Setting of the secondary transfer cleaning conditions	AE	2TRAN_CLEAN_TIME1	Secondary transfer cleaning process time judgment threshold value 1 (The total number of sheets for cleaning execution conditions) (Cleaning time: Short)	5 - 999	200
	AF	2TRAN_CLEAN_TIME2	Secondary transfer cleaning process time judgment threshold value 2 (The total number of sheets for cleaning execution conditions) (Cleaning time: Medium)	5 - 999	300
	AG	2TRAN_CLEAN_TIME3	Secondary transfer cleaning process time judgment threshold value 3 (The total number of sheets for cleaning execution conditions) (Cleaning time: Long)	5 - 999	500

When REFRESH MODE setting is enabled (0), the menu of the user process control execution button is displayed on the user system setting menu.

When the color balance or the density change is not within the allowable range, the user can perform the process control manually and forcibly. However, toner is consumed greater than as usual. This point must be explained to the user clearly.

<b>44-29</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the operating conditions of the process control during a job.
<b>Section</b>	Process

#### Operation/Procedure

- 1) Select a target item of setting with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

Item/Display		Content	Setting range		Default value
A	COPY	During copy job	0 - 2	0: No execution 1: HV only 2: HV → HT	2
B	PRINTER	During print job			2
C	FAX	During FAX print job			2
D	SELF PRINT	During self print			2
E	CPY TO PRT TABLE	Halftone process control copier - printer conversion table select	0 - 1	0: CALCULATED 1: DEFAULT	0
				0: Color balance calculation value (Revised every time when SIM46-74 is executed.) 1: Default (Fixed value)	

HV: High density process control

HT: Halftone process control

<b>44-31</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the OPC drum phase. (Manual adjustment)
<b>Section</b>	Process

#### Operation/Procedure



For the OPC drum phase adjustment, do not use this simulation, but use SIM50-22 (auto adjustment).

- 1) Select item A with scroll key.
- 2) Enter the value corresponding to the adjustment pattern with 10-key.
- 3) Press [EXECUTE] key. (The adjustment pattern is printed out.)
- 4) Select an adjustment pattern whose deflection is within two scale lines on the adjustment pattern of C, M, Y colors.
- 5) Select item B with scroll key.
- 6) Enter the adjustment pattern sheet number selected in procedure 4).
- 7) Press [EXECUTE] key.
- 8) The adjusted adjustment pattern is printed.

<b>44-37</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the development bias correction level in the continuous printing operation.
<b>Section</b>	

#### Operation/Procedure

- 1) Select a set target color with the touch panel.
- 2) Select a target item with scroll keys.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key. (The set value is saved.)

#### Note

When the print density is varied in the continuous printing operation, this simulation is used.

			Item/Display		Default value		Variable range
			Black	CMY	Black	CMY	
Current DV Bias voltage	Low speed mode Heavy paper mode	less than 300 [v]	A	A	0	0	0-5 (*1)
		300 [v] or more, less than 450 [v]	B	B	0	0	
		450 [v] or more	C	C	0	0	
	Middle speed mode	less than 300 [v]	D	D	0	0	
		300 [v] or more, less than 450 [v]	E	E	0	0	
		450 [v] or more	F	F	0	0	
	High speed mode Monochrome mode	less than 300 [v]	G	-	0	-	
		300 [v] or more, less than 450 [v]	H	-	0	-	
		450 [v] or more	I	-	0	-	
Time (T) from termination of continuous outputs to start of the next output operation	Low speed mode Heavy paper mode	Less than 10 [sec] & after process control JOB	J	G	4	4	1-12
		10 [sec] or more, less than 60 [sec]	K	H	3	3	
		60 [sec] or more, less than 240 [sec]	L	I	1	1	
		240 [sec] or more	M	J	1	1	
	Middle speed mode	Less than 10 [sec] & after process control JOB	N	K	4	4	
		10 [sec] or more, less than 60 [sec]	O	L	3	3	
		60 [sec] or more, less than 240 [sec]	P	M	1	1	
		240 [sec] or more	Q	N	1	1	
	High speed mode Monochrome mode	Less than 10 [sec] & after process control JOB	R	-	4	-	
		10 [sec] or more, less than 60 [sec]	S	-	3	-	
		60 [sec] or more, less than 240 [sec]	T	-	1	-	
		240 [sec] or more	U	-	1	-	

<Use example>

(\*1)

Make multi copy of 10 sheets. If the density of 10th sheet is greater than that of the first sheet, decrease the set value.

Make multi copy of 10 sheets. If the density of 10th sheet is smaller than that of the first sheet, increase the set value.

When the set value is 0 (Default), the correction level does not work.

<b>44-43</b>	
<b>Purpose</b>	Data display
<b>Function (Purpose)</b>	Used to display the identification information of the developing unit.
<b>Section</b>	Developing system

#### Operation/Procedure

The identification number and the identification signal level of the developing unit are displayed.

Item/Display		Content	Display range	NOTE
A	DVCH KIND K	K developing unit identification number	1 - 9	The model identification number of the developing unit which is backed up in the EEPROM of the machine.
B	DVCH KIND C	C developing unit identification number	1 - 9	
C	DVCH KIND M	M developing unit identification number	1 - 9	
D	DVCH KIND Y	Y developing unit identification number	1 - 9	
E	DV_TYP_SEL_K	K developing unit identification detection	0 - 1	0 = High (Open) 1 = Low (GND)
F	DV_TYP_SEL_C	C developing unit identification detection	0 - 1	
G	DV_TYP_SEL_M	M developing unit identification detection	0 - 1	
H	DV_TYP_SEL_Y	Y developing unit identification detection	0 - 1	
I	DVCH_AD_K	K developing unit identification AD value	0 - 255	AD value of the developing unit identification voltage
J	DVCH_AD_C	C developing unit identification AD value	0 - 255	
K	DVCH_AD_M	M developing unit identification AD value	0 - 255	
L	DVCH_AD_Y	Y developing unit identification AD value	0 - 255	

\* The developing unit is identified by the combination of items E, F, G, H and items I, J, K, and L.

44-61	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the color image density sensor. (The adjustment is made according to the input of SIM44-13 to set the target value of the color sensor gain adjustment.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

Item/Display	Content	Setting range	Default value
A PCS_CL CARB OUT	Calibration plate sensor value	1 - 255	108
B PCS_CL LED ADJ	Color sensor light emitting quantity adjustment value	1 - 255	21

44-62	
<b>Purpose</b>	Setup/Adjustment
<b>Function (Purpose)</b>	Used to set the process control execution conditions.
<b>Section</b>	Process

#### Operation/Procedure

This simulation allows collective change in the set contents of SIM44-4 and SIM44-28.

A suitable one is selected among a number of options depending on the condition.

- 1) Select an item to be set.  
To change the image density in the high density area, select PROCON TARGET.  
To change the frequency of the process control operations, select PROCON MODE.

Display/Item	Content
PROCON TARGET	CL ID DOWN The densities of C, M, and Y decrease. (The C/M/Y high density process control target values decrease.)
	CL ID UP The densities of C, M, and Y increase. (The C/M/Y high density process control target values increase.)
	BK ID DOWN The density of K decreases. (The high density process control target value decreases.)
	BK ID UP The density of K increases. (The high density process control target value increases.)
	ALL ID DOWN The densities of C, M, Y and K decrease. (The C/M/Y/K high density process control target values decrease.)
	ALL ID UP The densities of C, M, Y and K increase. (The C/M/Y/K high density process control target values increase.)
	NORMAL The standard density of C, M, Y and K. (The C/M/Y/K high density process control target values are the standard values.)

Display/Item	Content
PROCON MODE	HIGH QUALITY1 The execution frequency of the process control is high. (It is set when the color image quality is given priority.)
	HIGH QUALITY2 The execution frequency of the process control is highest. (It is set when the color image quality is given priority.)
	PRINT PERFORMANCE The execution frequency of the process control is low. (It is set when the job speed is given priority.)
	BW MODE The process control is executed in the normal frequency. (It is set when there are little color jobs and many monochrome jobs.)
	NORMAL The process control is executed in the normal frequency.

(When PROCON TARGET is selected.)

2A) Select the density level.

(When PROCON MODE is selected.)

- 2B) Select the execution frequency of the process control.
- 3) Press [EXECUTE] key.
- 4) Press [YES] key.

#### Note

This simulation may not function with some firmware versions.

In such a case, the firmware must be upgraded to the latest version.

## 46

46-1	
<b>Purpose</b>	Adjustment (Color copy mode)
<b>Function (Purpose)</b>	Used to adjust the copy density in the copy mode.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.  
\* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

To adjust the copy density in the low density area, select the "LOW" mode and change the adjustment value. To adjust the copy density in the high density area, select the "HIGH" mode and change the adjustment value.

When the adjustment value is increased, the copy density is increased. When the adjustment value is decreased, the copy density is decreased.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Item/Display	Content	Setting range	Default value
A AUTO	Auto	LOW	1 - 99
		HIGH	1 - 99
B TEXT	Text	LOW	1 - 99
		HIGH	1 - 99
C TEXT/PRINTED PHOTO	Text/Printed Photo	LOW	1 - 99
		HIGH	1 - 99
D TEXT/PHOTO	Text/Photograph	LOW	1 - 99
		HIGH	1 - 99
E PRINTED PHOTO	Printed Photo	LOW	1 - 99
		HIGH	1 - 99
F PHOTOGRAPH	Photograph	LOW	1 - 99
		HIGH	1 - 99

Item/Display		Content		Setting range	Default value
G	MAP	Map	LOW	1 - 99	50
			HIGH	1 - 99	50
H	LIGHT	Light document	LOW	1 - 99	50
			HIGH	1 - 99	50
I	TEXT(COPY TO COPY)	Text (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
J	TEXT/PRINTED PHOTO (COPY TO COPY)	Text/Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
K	PRINTED PHOTO (COPY TO COPY)	Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
L	TEXT (COLOR TONE ENHANCEMENT)	Text (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
M	TEXT/PRINTED PHOTO (COLOR TONE ENHANCEMENT)	Text/Printed Photo (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
N	TEXT/PHOTO (COLOR TONE ENHANCEMENT)	Text/Photograph (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
O	PRINTED PHOTO (COLOR TONE ENHANCEMENT)	Printed Photo (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
P	PHOTOGRAPH (COLOR TONE ENHANCEMENT)	Photograph (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
Q	MAP (COLOR TONE ENHANCEMENT)	Map (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
R	SINGLE COLOR	Single color	LOW	1 - 99	50
			HIGH	1 - 99	50
S	SINGLE COLOR (COPY TO COPY)	Single color (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
T	TWO COLOR	2-color (red/black) copy	LOW	1 - 99	50
			HIGH	1 - 99	50
U	TWO COLOR (COPY TO COPY)	2-color (red/black) copy (copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50

#### 26cpm/36cpm/31cpm(A) machine

Item/Display		Content		Setting range	Default value
A	AUTO	Auto	LOW	1 - 99	50
			HIGH	1 - 99	50
B	TEXT	Text	LOW	1 - 99	50
			HIGH	1 - 99	50
C	TEXT/PRINTED PHOTO	Text/Printed Photo	LOW	1 - 99	50
			HIGH	1 - 99	50
D	TEXT/PHOTO	Text/Photograph	LOW	1 - 99	50
			HIGH	1 - 99	50
E	PRINTED PHOTO	Printed Photo	LOW	1 - 99	50
			HIGH	1 - 99	50
F	PHOTOGRAPH	Photograph	LOW	1 - 99	50
			HIGH	1 - 99	50
G	MAP	Map	LOW	1 - 99	50
			HIGH	1 - 99	50
H	LIGHT	Light document	LOW	1 - 99	50
			HIGH	1 - 99	50
I	TEXT(COPY TO COPY)	Text (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
J	TEXT/PRINTED PHOTO (COPY TO COPY)	Text/Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
K	PRINTED PHOTO (COPY TO COPY)	Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
L	TEXT (COLOR TONE ENHANCEMENT)	Text (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50

Item/Display		Content		Setting range	Default value
M	TEXT/PRINTED PHOTO (COLOR TONE ENHANCEMENT)	Text/Printed Photo (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
N	TEXT/PHOTO (COLOR TONE ENHANCEMENT)	Text/Photograph (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
O	PRINTED PHOTO (COLOR TONE ENHANCEMENT)	Printed Photo (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
P	PHOTOGRAPH (COLOR TONE ENHANCEMENT)	Photograph (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
Q	MAP (COLOR TONE ENHANCEMENT)	Map (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
R	LIGHT (COLOR TONE ENHANCEMENT)	Light document (Color tone enhancement)	LOW	1 - 99	50
			HIGH	1 - 99	50
S	SINGLE COLOR	Single color	LOW	1 - 99	50
			HIGH	1 - 99	50
T	SINGLE COLOR (COPY TO COPY)	Single color (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
U	TWO COLOR	2-color (red/black) copy	LOW	1 - 99	50
			HIGH	1 - 99	50
V	TWO COLOR (COPY TO COPY)	2-color (red/black) copy (copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50

46-2

#### Purpose

Adjustment (Monochrome copy mode)

#### Function (Purpose)

Used to adjust the copy density in the copy mode.

#### Section

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.  
\* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

To adjust the copy density in the low density area, select the "LOW" mode and change the adjustment value. To adjust the copy density in the high density area, select the "HIGH" mode and change the adjustment value.

When the adjustment value is increased, the copy density is increased. When the adjustment value is decreased, the copy density is decreased.

Item/Display		Content		Setting range	Default value
A	AUTO1	Auto 1	LOW	1 - 99	50
			HIGH	1 - 99	50
B	AUTO2	Auto 2	LOW	1 - 99	50
			HIGH	1 - 99	50
C	TEXT	Text	LOW	1 - 99	50
			HIGH	1 - 99	50
D	TEXT/PRINTED PHOTO	Text/Printed Photo	LOW	1 - 99	50
			HIGH	1 - 99	50
E	TEXT/PHOTO	Text/Photograph	LOW	1 - 99	50
			HIGH	1 - 99	50
F	PRINTED PHOTO	Printed Photo	LOW	1 - 99	50
			HIGH	1 - 99	50
G	PHOTOGRAPH	Photograph	LOW	1 - 99	50
			HIGH	1 - 99	50
H	MAP	Map	LOW	1 - 99	50
			HIGH	1 - 99	50

Item/Display		Content		Setting range	Default value
I	TEXT (COPY TO COPY)	Text (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
J	TEXT/PRINTED PHOTO (COPY TO COPY)	Text/Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
K	PRINTED PHOTO (COPY TO COPY)	Printed Photo (Copy document)	LOW	1 - 99	50
			HIGH	1 - 99	50
L	LIGHT	Light document	LOW	1 - 99	50
			HIGH	1 - 99	50

<b>46-4</b>	
<b>Purpose</b>	Adjustment (Color scanner mode)
<b>Function (Purpose)</b>	Used to adjust the density in the image send mode.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.  
\* When the  $\triangle \nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Mode	Item/Display		Content	Setting range	Default value
LOW	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
HIGH	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50

#### 26cpm/36cpm/31cpm(A) machine

Mode	Item/Display		Content	Setting range	Default value
LOW	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
	H	RIP	—	1 - 99	50
HIGH	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
	H	RIP	—	1 - 99	50

<b>46-5</b>	
<b>Purpose</b>	Adjustment (Monochrome scanner mode)
<b>Function (Purpose)</b>	Used to adjust the density in the image send mode.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.  
\* When the  $\triangle \nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Mode	Item/Display		Content	Setting range	Default value
LOW	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
HIGH	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50

#### 26cpm/36cpm/31cpm(A) machine

Mode	Item/Display		Content	Setting range	Default value
LOW	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
	H	RIP	—	1 - 99	50
HIGH	A	AUTO	Auto	1 - 99	50
	B	TEXT	Text	1 - 99	50
	C	TEXT/PRINTED PHOTO	Text/Printed Photo	1 - 99	50
	D	TEXT/PHOTO	Text/Photograph	1 - 99	50
	E	PRINTED PHOTO	Printed Photo	1 - 99	50
	F	PHOTOGRAPH	Photograph	1 - 99	50
	G	MAP	Map	1 - 99	50
	H	RIP	—	1 - 99	50



<b>46-8</b>	
<b>Purpose</b>	Adjustment (Color scanner mode)
<b>Function (Purpose)</b>	Used to adjust the image send mode color balance RGB.

#### Section

#### Operation/Procedure

- 1) Select an adjustment target with [R] [G] [B] keys on the touch panel.
- 2) Select an adjustment target item with scroll key on the touch panel.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key. (The set value is saved.)

The color balance can be adjusted separately for the low density area and the high density area.

When the adjustment value is increased, the image density of the target color is increased, and vice versa.

	Item/Display	Content	Default value
A	LOW DENSITY POINT	Low density correction amount	50
B	HIGH DENSITY POINT	High density correction amount	50

<b>46-9</b>	
<b>Purpose</b>	Adjustment (RSPF mode)
<b>Function (Purpose)</b>	Used to adjust the scan image density.

#### Section

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
  - \* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

This adjustment result affects the image send mode, the copy mode, and the fax mode.

When the adjustment value is increased, the image density is increased, and vice versa.

#### [RSPF]

	Item/Display	Content	Setting range	Default value
A	COPY : LOW	RSPF copy mode exposure adjustment (Low density side)	1 - 99	48
B	SCAN : LOW	RSPF scanner mode exposure adjustment (Low density side)	1 - 99	48
C	FAX : LOW	RSPF FAX mode exposure adjustment (Low density side)	1 - 99	48
D	COPY : HIGH	RSPF copy mode exposure adjustment (High density side)	1 - 99	53
E	SCAN : HIGH	RSPF scanner mode exposure adjustment (Low density side)	1 - 99	53
F	FAX : HIGH	RSPF FAX mode exposure adjustment (high density)	1 - 99	53

<b>46-10</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the copy color balance and the gamma (for each color copy mode).

#### Section

#### Operation/Procedure

- 1) Select an adjustment target mode with the touch panel key.
- 2) Select an adjustment target color with [K][C][M][Y] keys on the touch panel.
- 3) Select an adjustment target item with scroll key on the touch panel.
- 4) Enter the set value with 10-key.
  - \* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 5) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

TEXT	Text
TEXT/PRT PHOTO	Text/Printed Photo
PRINTED PHOTO	Printed Photo
PHOTO + TEXT/PHOTO	Photograph + Text/Printed Photo
MAP	Map
LIGHT	Light document
COPY ORG	Copy document

	Item/Display	Density level (Point)	Setting range	Default value
A	POINT1	Point 1	1 - 999	500
B	POINT2	Point 2	1 - 999	500
C	POINT3	Point 3	1 - 999	500
D	POINT4	Point 4	1 - 999	500
E	POINT5	Point 5	1 - 999	500
F	POINT6	Point 6	1 - 999	500
G	POINT7	Point 7	1 - 999	500
H	POINT8	Point 8	1 - 999	500
I	POINT9	Point 9	1 - 999	500
J	POINT10	Point 10	1 - 999	500
K	POINT11	Point 11	1 - 999	500
L	POINT12	Point 12	1 - 999	500
M	POINT13	Point 13	1 - 999	500
N	POINT14	Point 14	1 - 999	500
O	POINT15	Point 15	1 - 999	500
P	POINT16	Point 16	1 - 999	500
Q	POINT17	Point 17	1 - 999	500

<b>46-16</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the monochrome copy density and the gamma (for each monochrome copy mode).

#### Section

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
  - \* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 3) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

Item/Display	Density level (Point)	Setting range	Default value
A POINT1	Point 1	1 - 999	500
B POINT2	Point 2	1 - 999	500
C POINT3	Point 3	1 - 999	500
D POINT4	Point 4	1 - 999	500
E POINT5	Point 5	1 - 999	500
F POINT6	Point 6	1 - 999	500
G POINT7	Point 7	1 - 999	500
H POINT8	Point 8	1 - 999	500
I POINT9	Point 9	1 - 999	500
J POINT10	Point 10	1 - 999	500
K POINT11	Point 11	1 - 999	500
L POINT12	Point 12	1 - 999	500
M POINT13	Point 13	1 - 999	500
N POINT14	Point 14	1 - 999	500
O POINT15	Point 15	1 - 999	500
P POINT16	Point 16	1 - 999	500
Q POINT17	Point 17	1 - 999	500

<b>46-19</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the operating conditions for the density scanning (exposure) of monochrome auto copy mode documents.

#### Section

#### Operation/Procedure

Select an item to be set with touch panel.

When an item is selected, it is highlighted and the setting change is saved.

Item/Display	Content	Set value	Default value
AE_MODE	Auto exposure mode	MODE1, MODE2	MODE1
AE_STOP_COPY	Auto B/W exposure Stop (for copy)	REALTIME/ STOP/ PRESCAN	STOP
AE_STOP_FAX	Auto B/W exposure Stop (for FAX)	ON/OFF	ON
AE_STOP_SCAN	Auto B/W exposure Stop (for scanner)	REALTIME/ STOP/ PRESCAN	STOP
AE_FILTER	Auto exposure filter setting	SOFT NORMAL SHARP	NORMAL
AE_WIDTH	AE exposure width	FULL/PART	FULL

#### Note

MODE 1	High gamma (high contrast images)
MODE 2	Normal gamma
STOP	The image density in 3 - 7mm area at the lead edge is scanned, and the output image density is determined according to the scanned density. (The output image density is even for all the surface.)
REALTIME	The densities of the document width are scanned sequentially, and the output image density is determined according to the density in each area of document. (The output image density may not be even for all the surface.)
PRESCAN	The densities of the all surface of document are scanned sequentially, and the output image density is determined according to the average of the scanned densities. (The output image density is even for all the surface.)
AE WIDTH FULL	The document density scan area in the monochrome auto mode is 3 - 7mm at the document lead edge x the document width. This is not related to the PRESCAN mode.

AE WIDTH PART	The document density scan area in the monochrome auto mode is 3 - 7mm at the document lead edge x 100mm width. This is not related to the PRESCAN mode.
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<b>46-21</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Copy color balance adjustment (Manual adjustment)

#### Section

#### Operation/Procedure

- 1) Select an adjustment target color with [K][C][M][Y] keys on the touch panel.
- 2) Select an adjustment target item with scroll key on the touch panel.
- 3) Enter the set value with 10-key.  
\* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 4) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

When [EXECUTE] key is pressed, the check pattern in printed in the color balance and density corresponding to the adjustment value.

Item/Display	Density level (Point)	Setting range	Default value
A POINT1	Point 1	1 - 999	500
B POINT2	Point 2	1 - 999	500
C POINT3	Point 3	1 - 999	500
D POINT4	Point 4	1 - 999	500
E POINT5	Point 5	1 - 999	500
F POINT6	Point 6	1 - 999	500
G POINT7	Point 7	1 - 999	500
H POINT8	Point 8	1 - 999	500
I POINT9	Point 9	1 - 999	500
J POINT10	Point 10	1 - 999	500
K POINT11	Point 11	1 - 999	500
L POINT12	Point 12	1 - 999	500
M POINT13	Point 13	1 - 999	500
N POINT14	Point 14	1 - 999	500
O POINT15	Point 15	1 - 999	500
P POINT16	Point 16	1 - 999	500
Q POINT17	Point 17	1 - 999	500

<b>46-23</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the density correction of copy high density section (High density tone gap supported).

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.

0	Enable
1	Inhibit

- 2) Press [OK] key. (The set value is saved.)

Item/Display	Content	Setting range	Default value
A CMY (0: ENABLE 1: DISABLE)	0 CMY engine highest density correction mode: Enable	0 - 1	0
	1 CMY engine highest density correction mode: Disable		

Item/Display		Content		Setting range	Default value
B	K (0: ENABLE 1: DISABLE)	0	K engine highest density correction mode: Enable	0 - 1	1
		1	K engine highest density correction mode: Disable		
C	CYAN MAX TARGET	Scanner target value for CYAN maximum density correction		0 - 999	500
D	MAGENTA MAX TARGET	Scanner target value for MAGENTA maximum density correction		0 - 999	500
E	YELLOW MAX TARGET	Scanner target value for YELLOW maximum density correction		0 - 999	500
F	BLACK MAX TARGET	Scanner target value for BLACK maximum density correction		0 - 999	500

\* When tone gap is generated in the high density area, set items A and B to "0".

The density of high density part decreases. However, the tone gap is better.

\* To increase the density in the high density area further, set items A and B to "1".

The tone gap may occur in high density part.

### Important

Do not change the values of items C, D, E, and F. If these values are changed, the density in the high density area is changed.

<b>46-24</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Copy color balance adjustment (Auto adjustment)
<b>Section</b>	

### Operation/Procedure

- Press [EXECUTE] key.  
The color patch image (adjustment pattern) is printed out.
- Place the printed adjustment pattern on the document table, select [FACTORY] or [SERVICE] mode.
- Press [EXECUTE] key.  
The copy color balance automatic adjustment is performed, then the adjustment result pattern is printed.
- Press [OK] key.  
The halftone correction target registration is processed.

<b>46-25</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the copy color balance. (Single color copy mode)
<b>Section</b>	

### Operation/Procedure

- Select an adjustment target color with [C][M][Y] keys on the touch panel.
- Select an adjustment target item with scroll key on the touch panel.
- Enter the set value with 10-key.
- Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density of the target color is increased, and vice versa.

### 18cpm/20cpm/23cpm/31cpm(G) machine

Item/Display		Setting range	Default value		
			C	M	Y
A	RED	0 - 255	0	255	200

Item/Display		Setting range	Default value		
			C	M	Y
B	GREEN	0 - 255	255	0	255
C	BLUE	0 - 255	255	150	0
D	CYAN	0 - 255	255	0	0
E	MAGENTA	0 - 255	0	255	0
F	YELLOW	0 - 255	0	0	255

### 26cpm/36cpm/31cpm(A) machine

Item/Display		Setting range	Default value		
			C	M	Y
A	RED	0 - 255	0	255	200
B	GREEN	0 - 255	255	0	255
C	BLUE	0 - 255	255	150	0
D	CYAN	0 - 255	255	0	0
E	MAGENTA	0 - 255	0	255	0
F	YELLOW	0 - 255	0	0	255
G	ORANGE	0 - 255	0	150	255
H	NAVY	0 - 255	255	200	0
I	LIGHT GREEN	0 - 255	150	0	150
J	LIGHT BLUE	0 - 255	150	20	0
K	AQUA MARINE	0 - 255	170	0	50
L	PURPLE	0 - 255	128	255	0
M	PINK	0 - 255	0	150	20
N	YELLOW GREEN	0 - 255	128	0	255
O	BEIGE	0 - 255	0	50	170

<b>46-26</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to reset the single color mode color balance set value to the default.

### Section

### Operation/Procedure

- Press [EXECUTE] key.
- Press [YES] key.  
The color balance value of the single color mode is reset to the default value.

<b>46-27</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the gamma/density of copy images, texts, and line image edges.

### Section

### Operation/Procedure

- Select a target item of setting with scroll key on the touch panel.
- Enter the set value with 10-key.
- Press [OK] key. (The set value is saved.)

Item/Display (Copy mode)	Content	Setting range	Default value
A BLACK TEXT (SLOPE)	Black character edge gamma skew adjustment	1 - 99	50
B BLACK TEXT (INTERCEPT)	Black character edge density adjustment	1 - 99	50
C COLOR TEXT (SLOPE)	Color character edge gamma skew adjustment	1 - 99	50
D COLOR TEXT (INTERCEPT)	Color character edge density adjustment	1 - 99	50
E ED TEXT (SLOPE)	Text/Map mode gamma adjustment (Text/Map mode)	1 - 99	50
F ED TEXT (INTERCEPT)	Text/Map mode density adjustment (Text/Map mode)	1 - 99	50

When the adjustment values of items A, C, and E are changed, the gamma of text and line edge image density section is changed.

When the adjustment value is increased, the image contrast of character edge and line edge is increased. When the adjustment value is decreased, the image contrast of character and line edge is decreased.

When the adjustment values of items B, D, and F are increased, the image density of text and line edge section is decreased, and vice versa.

<b>46-30</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the resolution in the sub scanning direction in the copy mode.
<b>Section</b>	
<b>Operation/Procedure</b>	
1)	Refer to the following table, and enter the set value corresponding to the resolution mode with 10-key.
2)	Press [OK] key. (The set value is saved.)

Item/Display		Content		Setting range		Default value
A	SCAN RESOLUTION SW	Scan resolution selection (COPY: COLOR)	Mode1	0 - 1	0	0
			Mode2		1	

Mode	Scan mode	Resolution in the sub scanning direction (DPI)		
		25-99% [Magnification ratio]	100-200% [Magnification ratio]	201-400% [Magnification ratio]
Mode1	OC	600	600	1200
	RSPF	600	600	1200

<b>46-36</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the colors in the 2-color copy mode.
<b>Section</b>	
<b>Operation/Procedure</b>	
1)	Select a target adjustment item with scroll key on the touch panel.
2)	Enter the set value with 10-key.
3)	Press [OK] key. (The set value is saved.)
By changing the density level of each color, the color adjustment in the 2-color copy mode can be performed.	

#### 26cpm/36cpm/31cpm(A) machine

Item/Display			Content	Setting range	Default value			Default value
					C	M	Y	
OUTCOLOR (Output color coefficient)	A	RED	R output color	0 - 255	0	255	200	-
	B	GREEN	G output color	0 - 255	255	0	255	-
	C	BLUE	B output color	0 - 255	255	150	0	-
	D	CYAN	C output color	0 - 255	255	0	0	-
	E	MAGENTA	M output color	0 - 255	0	255	0	-
	F	YELLOW	Y output color	0 - 255	0	0	255	-
	G	ORANGE	O output color	0 - 255	0	150	255	-
	H	NAVY	N output color	0 - 255	255	200	0	-
	I	LIGHT GREEN	LG output color	0 - 255	150	0	150	-
	J	LIGHT BLUE	LB output color	0 - 255	150	20	0	-
	K	AQUA MARINE	AM output color	0 - 255	170	0	50	-
	L	PURPLE	PU output color	0 - 255	128	255	0	-
	M	PINK	P output color	0 - 255	0	150	20	-
	N	YELLOW GREEN	YG output color	0 - 255	128	0	255	-
	O	BEIGE	BE output color	0 - 255	0	50	170	-

Mode	Scan mode	Resolution in the sub scanning direction (DPI)		
		25-99% [Magnification ratio]	100-200% [Magnification ratio]	201-400% [Magnification ratio]
Mode2	OC	300	600	1200
	RSPF	400	600	1200

<b>46-32</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the document background density reproducibility in the monochrome auto copy mode.
<b>Section</b>	
<b>Operation/Procedure</b>	
1)	Select a target item of setting with scroll key on the touch panel.
2)	Enter the set value with 10-key.
3)	Press [OK] key. (The set value is saved.)

When the adjustment value is increased, reproducibility of the background and the low density image is increased. When the adjustment value is decreased, reproducibility of the background and the low density image is decreased.

#### [RSPF]

Item/Display		Content	Setting range	Default value
A	COPY : OC	Copy mode (for OC)	1 - 250	196
B	COPY : RSPF	Copy mode (for RSPF)	1 - 250	196
C	SCAN : OC	Scanner mode (for OC)	1 - 250	196
D	SCAN : RSPF	Scanner mode (for RSPF)	1 - 250	196
E	FAX : OC	FAX mode (for OC)	1 - 250	196
F	FAX : RSPF	FAX mode (for RSPF)	1 - 250	196

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Item/Display		Content	Setting range	Default value		
				C	M	Y
A	RED	R output color	0 - 255	0	255	200
B	GREEN	G output color	0 - 255	255	0	255
C	BLUE	B output color	0 - 255	255	150	0
D	CYAN	C output color	0 - 255	255	0	0
E	MAGENTA	M output color	0 - 255	0	255	0
F	YELLOW	Y output color	0 - 255	0	0	255

Item/Display			Content	Setting range	Default value			Default value
					C	M	Y	
CHROMA (Chroma adjustment)	A	RED / BLACK	Red extraction mode (The red recognition area is adjusted.)	0 - 6	-	-	-	3
	B	KS:CHROMATIC	Chromatic color extraction mode (The chromatic color recognition area is adjusted.)	0 - 6	-	-	-	3

46-37

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the reproduction capability of monochrome mode color.
<b>Section</b>	

#### Operation/Procedure

- 1) Select a target item with scroll keys on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key.
- 4) Press [YES] key.

This is to adjust the reproduction capability of red and yellow images when copying color documents with red and yellow images in the monochrome mode.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Applied to the copy mode only.

Item/Display		Content	Setting range	Default value
A	R-Ratio	Gray making setting (R)	0 - 1000	63
B	G-Ratio	Gray making setting (G)	0 - 1000	877

#### 26cpm/36cpm/31cpm(A) machine

An individual adjustment is available in each of the copy mode and the printer mode.

Item/Display		Content	Setting range	Default value
A	R-Ratio	Gray making setting (R)	0 - 1000	63
B	G-Ratio	Gray making setting (G)	0 - 1000	877
C	R-Ratio RIP	Print gray making setting (R)	0 - 1000	299
D	G-Ratio RIP	Print gray making setting (G)	0 - 1000	587

B-Ratio	Gray making setting (B) (1000-R-Ratio - G-Ratio)
B-Ratio RIP	Print gray making setting (B) (1000-R-Ratio RIP - G-Ratio RIP)

\* B-Ratio: The value of gray making setting (B) is obtained from the formula below.

$$1000 - R\text{-Ratio} - G\text{-Ratio}$$

When [DEFAULT] key is pressed, the values are set to the initial values (Default).

When the adjustment value of the adjustment item A is increased, the copy density of red images is decreased. When the adjustment value is decreased, the density is increased.

When the adjustment value of the adjustment item B is increased, the copy density of yellow images is increased. When the adjustment value is decreased, the density is also decreased.

46-38

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the black component amount in the color copy mode.
<b>Section</b>	

#### Operation/Procedure

- 1) Select the AUTO MODE or the MANUAL MODE with the mode key.
- 2) Select the mode to be adjusted with the scroll key.
- 3) Press the black component amount select key.

This adjusts black ingredient amount in the color copy mode. (except character and line image)

As a result of this adjustment, the gradation of the shade part changes.

Item/Display (Copy mode)		Select button	Content	Default value
MANUAL	TEXT PRT	(-) LUT2	Text print (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	TEXT	(-) LUT2	Text (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	PRINTED PHOTO	(-) LUT2	Printed photo (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	PHOTO	(-) LUT2	Photograph/Text photograph (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	TEXT PHOTO	(-) LUT2	Text/Photograph (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	MAP	(-) LUT2	Map (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	CP ORG/ TEXT PRT	(-) LUT2	Copy document/ Text printed (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	COPY ORG/ TEXT	(-) LUT2	Copy document/ Text (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		

Item/Display (Copy mode)		Select button	Content	Default value
MANUAL	COPY ORG/ PHOTO	(-) LUT2	Copy document/ Printed photo (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	LIGHT ORIGINAL	(-) LUT2	Light document (Manual)	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
AUTO	AUTO0	(-) LUT2	Auto mode judgment 0	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO1	(-) LUT2	Auto mode judgment 1	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO2	(-) LUT2	Auto mode judgment 2	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO3	(-) LUT2	Auto mode judgment 3	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO4	(-) LUT2	Auto mode judgment 4	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO5	(-) LUT2	Auto mode judgment 5	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		
	AUTO6	(-) LUT2	Auto mode judgment 6	NORMAL
		(-) LUT1		
		NOMAL		
		(+) LUT1		
		(+) LUT2		

<b>46-39</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the sharpness of FAX send images.

#### Section

#### Operation/Procedure

- 1) Select a target item with scroll keys on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

Input small numeric value to obtain crispy image. Input large numeric value to decrease moire.

Item/Display	Content	Setting range	Default value
A	200 x 100 [DPI] OFF 200 x 100 [DPI] halftone OFF	0 - 2	1
B	200 x 200 [DPI] OFF 200 x 200 [DPI] halftone OFF	0 - 2	1
C	200 x 200 [DPI] ON 200 x 200 [DPI] halftone ON	0 - 2	1

Item/Display	Content	Setting range	Default value
D	200 x 400 [DPI] OFF 200 x 400 [DPI] halftone OFF	0 - 2	1
E	200 x 400 [DPI] ON 200 x 400 [DPI] halftone ON	0 - 2	1
F	400 x 400 [DPI] OFF 400 x 400 [DPI] halftone OFF	0 - 2	1
G	400 x 400 [DPI] ON 400 x 400 [DPI] halftone ON	0 - 2	1
H	600 x 600 [DPI] OFF 600 x 600 [DPI] halftone OFF	0 - 2	1
I	600 x 600 [DPI] ON 600 x 600 [DPI] halftone ON	0 - 2	1

<b>46-40</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (Collective adjustment of all the modes)

#### Section

#### Operation/Procedure

- 1) Set the document on the document table.
  - 2) Enter the set value with 10-key.
  - 3) Press [EXECUTE] key, or [OK] key
- When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display	Content	Setting range	Default value
A	EXPOSURE LEVEL(ALL) Used to adjust the FAX send image density. (Collective adjustment of all the modes)	1 - 99	50

<b>46-41</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (Normal)

#### Section

#### Operation/Procedure

- 1) Set the document on the document table.
  - 2) Enter the set value with 10-key.
  - 3) Press [EXECUTE] key, or [OK] key
- When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display	Content	Setting range	Default value
A	AUTO	Auto	1 - 99 50
B	EXPOSURE1	Exposure 1	1 - 99 50
C	EXPOSURE2	Exposure 2	1 - 99 50
D	EXPOSURE3	Exposure 3	1 - 99 50
E	EXPOSURE4	Exposure 4	1 - 99 50
F	EXPOSURE5	Exposure 5	1 - 99 50
G	EXECUTE MODE	Print mode	Auto Exposure 1 Exposure 2 Exposure 3 Exposure 4 Exposure 5 1 - 6 1 2 3 4 5 6 1 (AUTO)

To check the adjustment density level of items A - F, set the document and set the setting value of item G according to items A - F, and press [EXECUTE] key.

46-42

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (Fine)

**Section****Operation/Procedure**

- 1) Set the document on the document table.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key, or [OK] key

When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display		Content	Setting range		Default value
A	AUTO	Fine/Automatic	1 - 99		50
B	EXPOSURE1	Fine/Exposure 1	1 - 99		50
C	EXPOSURE2	Fine/Exposure 2	1 - 99		50
D	EXPOSURE3	Fine/Exposure 3	1 - 99		50
E	EXPOSURE4	Fine/Exposure 4	1 - 99		50
F	EXPOSURE5	Fine/Exposure 5	1 - 99		50
G	AUTO H_TONE	Fine/Automatic/ Halftone	1 - 99		50
H	EXPOSURE1 H_TONE	Fine/Exposure 1/ Halftone	1 - 99		50
I	EXPOSURE2 H_TONE	Fine/Exposure 2/ Halftone	1 - 99		50
J	EXPOSURE3 H_TONE	Fine/Exposure 3/ Halftone	1 - 99		50
K	EXPOSURE4 H_TONE	Fine/Exposure 4/ Halftone	1 - 99		50
L	EXPOSURE5 H_TONE	Fine/Exposure 5/ Halftone	1 - 99		50
M	EXECUTE MODE	AUTO	1 - 12	1	1 (AUTO)
		EXP1		2	
		EXP2		3	
		EXP3		4	
		EXP4		5	
		EXP5		6	
		AUTO H_TONE		7	
		EXP1 H_TONE		8	
		EXP2 H_TONE		9	
		EXP3 H_TONE		10	
		EXP4 H_TONE		11	
		EXP5 H_TONE		12	

To check the adjustment density level of items A - L, set the document and set the setting value of item M according to items A - L, and press [EXECUTE] key.

46-43

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (Super Fine)

**Section****Operation/Procedure**

- 1) Set the document on the document table.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key, or [OK] key

When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display		Content	Setting range		Default value
A	AUTO	Super Fine/Auto	1 - 99		50
B	EXPOSURE1	Super Fine/ Exposure 1	1 - 99		50
C	EXPOSURE2	Super Fine/ Exposure 2	1 - 99		50
D	EXPOSURE3	Super Fine/ Exposure 3	1 - 99		50
E	EXPOSURE4	Super Fine/ Exposure 4	1 - 99		50
F	EXPOSURE5	Super Fine/ Exposure 5	1 - 99		50
G	AUTO H_TONE	Super Fine/ Auto/Halftone	1 - 99		50
H	EXPOSURE1 H_TONE	Super Fine/ Exposure 1/Halftone	1 - 99		50
I	EXPOSURE2 H_TONE	Super Fine/ Exposure 2/Halftone	1 - 99		50
J	EXPOSURE3 H_TONE	Super Fine/ Exposure 3/Halftone	1 - 99		50
K	EXPOSURE4 H_TONE	Super Fine/ Exposure 4/Halftone	1 - 99		50
L	EXPOSURE5 H_TONE	Super Fine/ Exposure 5/Halftone	1 - 99		50
M	EXECUTE MODE	AUTO	1 - 12	1	1 (AUTO)
		EXP1		2	
		EXP2		3	
		EXP3		4	
		EXP4		5	
		EXP5		6	
		AUTO H_TONE		7	
		EXP1 H_TONE		8	
		EXP2 H_TONE		9	
		EXP3 H_TONE		10	
		EXP4 H_TONE		11	
		EXP5 H_TONE		12	

To check the adjustment density level of items A - L, set the document and set the setting value of item M according to items A - L, and press [EXECUTE] key.

46-44	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (Ultra fine)

#### Section

#### Operation/Procedure

- 1) Set the document on the document table.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key, or [OK] key

When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display		Content	Setting range		Default value
A	AUTO	Ultra Fine/Auto	1 - 99		50
B	EXPOSURE1	Ultra Fine/Exposure 1	1 - 99		50
C	EXPOSURE2	Ultra Fine/Exposure 2	1 - 99		50
D	EXPOSURE3	Ultra Fine/Exposure 3	1 - 99		50
E	EXPOSURE4	Ultra Fine/Exposure 4	1 - 99		50
F	EXPOSURE5	Ultra Fine/Exposure 5	1 - 99		50
G	AUTO H_TONE	Ultra Fine/Auto/ Halftone	1 - 99		50
H	EXPOSURE1 H_TONE	Ultra Fine/ Exposure 1/Halftone	1 - 99		50
I	EXPOSURE2 H_TONE	Ultra Fine/ Exposure 2/Halftone	1 - 99		50
J	EXPOSURE3 H_TONE	Ultra Fine/ Exposure 3/Halftone	1 - 99		50
K	EXPOSURE4 H_TONE	Ultra Fine/ Exposure 4/Halftone	1 - 99		50
L	EXPOSURE5 H_TONE	Ultra Fine/ Exposure 5/Halftone	1 - 99		50
M	EXECUTE MODE	AUTO	Print mode	Ultra Fine/ Auto	1 (AUTO)
		EXP1		Ultra Fine/ Exposure 1	
		EXP2		Ultra Fine/ Exposure 2	
		EXP3		Ultra Fine/ Exposure 3	
		EXP4		Ultra Fine/ Exposure 4	
		EXP5		Ultra Fine/ Exposure 5	
		AUTO H_TONE		Ultra Fine/ Auto/ Halftone	
		EXP1 H_TONE		Ultra Fine/ Exposure 1/ Halftone	
		EXP2 H_TONE		Ultra Fine/ Exposure 2/ Halftone	
		EXP3 H_TONE		Ultra Fine/ Exposure 3/ Halftone	
		EXP4 H_TONE		Ultra Fine/ Exposure 4/ Halftone	
		EXP5 H_TONE		Ultra Fine/ Exposure 5/ Halftone	

To check the adjustment density level of items A - L, set the document and set the setting value of item M according to items A - L, and press [EXECUTE] key.

46-45	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (600dpi).

#### Section

#### Operation/Procedure

- 1) Set the document on the document table.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key, or [OK] key

When [EXECUTE] key is pressed, the adjustment value is set and the scanned document image is outputted.

Item/Display		Content	Setting range		Default value
A	AUTO	600dpi/Auto 1	1 - 99		50
B	EXPOSURE1	600dpi/Exposure 1	1 - 99		50
C	EXPOSURE2	600dpi/Exposure 2	1 - 99		50
D	EXPOSURE3	600dpi/Exposure 3	1 - 99		50
E	EXPOSURE4	600dpi/Exposure 4	1 - 99		50
F	EXPOSURE5	600dpi/Exposure 5	1 - 99		50
G	AUTO H_TONE	600dpi/Auto/ Halftone 1	1 - 99		50
H	EXPOSURE1 H_TONE	600dpi/Exposure 1/ Halftone	1 - 99		50
I	EXPOSURE2 H_TONE	600dpi/Exposure 2/ Halftone	1 - 99		50
J	EXPOSURE3 H_TONE	600dpi/Exposure 3/ Halftone	1 - 99		50
K	EXPOSURE4 H_TONE	600dpi/Exposure 4/ Halftone	1 - 99		50
L	EXPOSURE5 H_TONE	600dpi/Exposure 5/ Halftone	1 - 99		50
M	EXECUTE MODE	AUTO	Print mode	600dpi/ Auto	1 (AUTO)
		EXP1		600dpi/ Exposure 1	
		EXP2		600dpi/ Exposure 2	
		EXP3		600dpi/ Exposure 3	
		EXP4		600dpi/ Exposure 4	
		EXP5		600dpi/ Exposure 5	
		AUTO H_TONE		600dpi/ Auto/ Halftone	
		EXP1 H_TONE		600dpi/ Exposure 1/ Halftone	
		EXP2 H_TONE		600dpi/ Exposure 2/ Halftone	
		EXP3 H_TONE		600dpi/ Exposure 3/ Halftone	
		EXP4 H_TONE		600dpi/ Exposure 4/ Halftone	
		EXP5 H_TONE		600dpi/ Exposure 5/ Halftone	

To check the adjustment density level of items A - L, set the document and set the setting value of item M according to items A - L, and press [EXECUTE] key.



46-46

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the FAX send image density. (RGB RIP) (26cpm/36cpm/31cpm(A) machine)

**Section****Operation/Procedure**

- 1) Select a target mode for adjustment.
- 2) Set the document on the document table.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key.

When the set value is increased, the density becomes higher.  
When the set value is decreased, the density becomes lower.

	Item/Display	Content	Setting range	Default value
A	STANDARD RIP	For Normal/ Halftone OFF mode	1 - 99	50
B	FINE RIP	For Fine/Halftone OFF mode	1 - 99	50
C	FINE RIP H_TONE	For Fine/Halftone ON mode	1 - 99	50
D	SUPER FINE RIP	For Super Fine/ Halftone OFF mode	1 - 99	50
E	SUPER FINE RIP H_TONE	For Super Fine/ Halftone ON mode	1 - 99	50
F	ULTRA FINE RIP	For Ultra fine/ Halftone OFF mode	1 - 99	50
G	ULTRA FINE RIP H_TONE	For Ultra fine/ Halftone ON mode	1 - 99	50
H	600DPI RIP	For 600dpi/ Halftone OFF mode	1 - 99	50
I	600DPI RIP H_TONE	For 600dpi/ Halftone ON mode	1 - 99	50

46-47

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the compression rate of copy and scan images (JPEG).

**Section****Operation/Procedure**

- 1) Select a target item with scroll keys on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
The set value is saved.

**18cpm/20cpm/23cpm/31cpm(G) machine**

Operation mode		Item/Display	Content	Setting range	Default value
FILLING (COLOR) (COPY (COLOR mode))* <sup>1</sup>	A	COPY (C)	LOW	Low compression (Color)	0
			MIDDLE	Medium compression (Color)	1
			HIGH	High compression (Color)	2
FILLING (GRAY) (COPY (Monochrome halftone mode))* <sup>1</sup>	B	COPY (G)	LOW	Low compression (Gray)	0
			MIDDLE	Medium compression (Gray)	1
			HIGH	High compression (Gray)	2
PUSH SCAN (COLOR) (Scanner (Color mode))	C	SCAN (C) * <sup>1</sup>	MIDDLE 1	Medium compression mode 1 Low compression	0
			MIDDLE 2	Medium compression mode 2 Medium compression	1
			MIDDLE 3	Medium compression mode 3 High compression	2
PUSH SCAN (GRAY) (Scanner (Monochrome halftone mode))	D	SCAN (G) * <sup>2</sup>	MIDDLE 1	Medium compression mode 1 Low compression	0
			MIDDLE 2	Medium compression mode 2 Medium compression	1
			MIDDLE 3	Medium compression mode 3 High compression	2

\*1: 20cpm machine: Disable without HDD.

\*2: Setting of compression rate for images when the image compression rate is set to "Medium" in the user mode.

**26cpm/36cpm/31cpm(A) machine**

Operation mode	Item/Display		Content	Setting range	Default value
FILLING (COLOR) Filing (Color mode)	A	FILLING (C)	LOW	Low compression (Color)	0
			MIDDLE	Medium compression (Color)	1
			HIGH	High compression (Color)	2
FILLING (GRAY) Filing (Monochrome halftone mode)	B	FILLING (G)	LOW	Low compression (Halftone)	0
			MIDDLE	Medium compression (Monochrome halftone mode)	1
			HIGH	High compression (Monochrome halftone mode)	2
PRINT HOLD (COLOR) Print hold (Color mode)	C	PRINT (C)	LOW	Low compression (Color)	0
			MIDDLE	Medium compression (Color)	1
			HIGH	High compression (Color)	2
PRINT HOLD (GRAY) Print hold (Monochrome halftone mode)	D	PRINT (G)	LOW	Low compression (Halftone)	0
			MIDDLE	Medium compression (Monochrome halftone mode)	1
			HIGH	High compression (Monochrome halftone mode)	2

Operation mode	Item/Display		Content	Setting range	Default value
PUSH SCAN (COLOR) (Scanner color)	E	SCAN (C) *1	MIDDLE 1	Medium compression mode 1 Low compression	0
			MIDDLE 2	Medium compression mode 2 Medium compression	1
			MIDDLE 3	Medium compression mode 3 High compression	2
PUSH SCAN (GRAY) (Scanner monochrome halftone mode)	F	SCAN (G) *1	MIDDLE 1	Medium compression mode 1 Low compression	0
			MIDDLE 2	Medium compression mode 2 Medium compression	1
			MIDDLE 3	Medium compression mode 3 High compression	2

\*1: Setting of compression rate for images when the image compression rate is set to "Medium" in the user mode.

**Note**

When the compression rate is increased, the HDD capacity in the document filing mode is decreased. On the other hand, however, the image quality of some documents may be remarkably reduced.

<b>46-51</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the gamma for the copy mode heavy paper mode and the image process mode.

#### Section

#### Operation/Procedure

- 1) Select a target adjustment mode with the touch panel key [PAPER/DITHER].
- 2) Select an adjustment target color with [K][C][M][Y] keys on the touch panel.
- 3) Select a target adjustment density level with scroll key on the touch panel.
- 4) Enter the set value with 10-key.
- 5) Press [EXECUTE] key, or [OK] key.  
When [EXECUTE] key is pressed, the self print image is out-putted.

When the image density is insufficient or a background copy is made in heavy paper copy, change this adjustment value to adjust the image density.

Item/Display	Content	Color
HEAVY*1	Copier heavy paper gamma	KCMY
DITH1*1	Black edge	K
DITH2*1	Color edge	KCMY
DITH3	Color error diffusion	KCMY
DITH4	Monochrome error diffusion	K
DITH8*1	Monochrome dither	K

\*1: 18cpm/20cpm machine: Disable without HDD.

	Item/Display	Density level (Point)	Setting range	Default value
A	POINT1	Point 1	1 - 999	500
B	POINT2	Point 2	1 - 999	500
C	POINT3	Point 3	1 - 999	500
D	POINT4	Point 4	1 - 999	500
E	POINT5	Point 5	1 - 999	500
F	POINT6	Point 6	1 - 999	500
G	POINT7	Point 7	1 - 999	500
H	POINT8	Point 8	1 - 999	500
I	POINT9	Point 9	1 - 999	500
J	POINT10	Point 10	1 - 999	500
K	POINT11	Point 11	1 - 999	500
L	POINT12	Point 12	1 - 999	500
M	POINT13	Point 13	1 - 999	500
N	POINT14	Point 14	1 - 999	500
O	POINT15	Point 15	1 - 999	500
P	POINT16	Point 16	1 - 999	500
Q	POINT17	Point 17	1 - 999	500

<b>46-52</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the gamma default for the copy mode heavy paper and the image process mode. (After execution of either SIM46-54 or SIM46-51, the adjustment value is reset to the initial value.)

#### Section

#### Operation/Procedure

- 1) Select an item to be set to the default with the touch panel key.  
To reset the adjustment values of all the items, select [ALL].
- 2) Press [EXECUTE] key.
- 3) Press [YES] key.

<b>46-54</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to perform the engine halftone automatic density adjustment (dither).

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.  
The high density process control is started to make 48 patch self print. (A4 (11" x 8.5") or A3 (11" x 17") paper in the paper feed tray is used.)
- 2) Place the 48 patch self print on the document table, and press [EXECUTE] key.  
Scanning the 48 patch self print is started.  
After scanning the 48 patch self print, the 17 patch self print is automatically printed.
- 3) Press [OK] key.  
After completion of the correction amount registration, the screen shifts to the dither selection menu.
- 4) Select an item (dither) to be adjusted.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

HEAVYPAPER*1	Copier/gamma for heavy paper
BLACK EDGE*1	Black edge
COLOR EDGE*1	Color edge
COLOR ED	Color error diffusion
B/W ED	Monochrome error diffusion
B/W 600*1	Monochrome dither 600dpi

\*1: 18cpm/20cpm machine: Disable without HDD.

#### 26cpm/36cpm/31cpm(A) machine

HEAVYPAPER	Copier/gamma for heavy paper
BLACK EDGE	Black edge
COLOR EDGE	Color edge
COLOR ED	Color error diffusion
B/W ED	Monochrome error diffusion
B/W 600	Monochrome dither 600dpi
WOVEN1	Watermark mode 1
WOVEN2	Watermark mode 2
WOVEN3	Watermark mode 3
WOVEN4	Watermark mode 4

- 5) Press [EXECUTE] key.  
The 48 patch self print is printed.
- 6) Place the 48 patch self print on the document table, and press [EXECUTE] key.  
Scanning the 48 patch self print is started.  
After scanning the patch, the screen automatically shifts to the dither selection menu.
- 7) After completion of the adjustment of all the density adjustment items (dither), press [OK] key.

<b>46-55</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the drop out color in the image send mode (monochrome manual text mode). (26cpm/36cpm/31cpm(A) machine)
<b>Section</b>	

#### Operation/Procedure

In the image send mode (monochrome manual text mode), the range where color images are reproduced as monochrome images is adjusted.

- 1) Enter the adjustment value with 10-key and press [OK] key.  
When the adjustment value is increased, colors dropout becomes easy to narrow the reproduction range. When the adjustment value is decreased, color dropout becomes difficult to widen the reproduction range.

Item/Display	Content	Setting range	Default value
A CHROMA	Dropout color range adjustment	0 - 6	3

- 2) Scan the document in the image send mode (monochrome manual text mode), and check the adjustment result.

<b>46-58</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the copy mode pseudo resolution. (Smoothing process)
<b>Section</b>	

#### Operation/Procedure

- 1) Select an item (mode) to be set with the button and the scroll key.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.  
1(ON): 9600 (equivalent) x 600 dpi  
0 (OFF): 600 x 600 dpi  
The setting is reflected only the image edge area.

Mode	Item/Display	Content (copy mode)	Setting range	Default value
COLOR	A AUTO	Auto	OFF 0 ON 1	0 (OFF)
	B TEXT	Text	OFF 0 ON 1	1 (ON)
	C TEXT PRT	Text print	OFF 0 ON 1	0 (OFF)
	D PRINTED PHOTO	Printed Photo	OFF 0 ON 1	0 (OFF)
	E TEXT PHOTO	Text photograph	OFF 0 ON 1	0 (OFF)
	F PHOTO	Photograph	OFF 0 ON 1	0 (OFF)
	G MAP	Map	OFF 0 ON 1	1 (ON)
	H LIGHT	Light document	OFF 0 ON 1	0 (OFF)
	I CPY TO CPY/ TEXT	Text (copy document)	OFF 0 ON 1	1 (ON)
	J CPY TO CPY/ TXT PRT	Text print (copy document)	OFF 0 ON 1	0 (OFF)
	K CPY TO CPY/ PHOTO	Printed Photo (copy document)	OFF 0 ON 1	0 (OFF)

Mode	Item/Display	Content (copy mode)	Setting range	Default value
MONO	A AUTO	Auto	OFF 0 ON 1	0 (OFF)
	B TEXT	Text	OFF 0 ON 1	1 (ON)
	C TEXT PRT	Text print	OFF 0 ON 1	0 (OFF)
	D PRINTED PHOTO	Printed Photo	OFF 0 ON 1	0 (OFF)
	E TEXT PHOTO	Text photograph	OFF 0 ON 1	0 (OFF)
	F PHOTO	Photograph	OFF 0 ON 1	0 (OFF)
	G MAP	Map	OFF 0 ON 1	1 (ON)
	H LIGHT	Light document	OFF 0 ON 1	0 (OFF)
	I CPY TO CPY/ TEXT	Text (copy document)	OFF 0 ON 1	1 (ON)
	J CPY TO CPY/ TXT PRT	Text print (copy document)	OFF 0 ON 1	0 (OFF)
	K CPY TO CPY/ PHOTO	Printed Photo (copy document)	OFF 0 ON 1	0 (OFF)

<b>46-59</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to perform the copy mode pseudo resolution image process adjustment.
<b>Section</b>	

#### Operation/Procedure

- 1) Select the MAIN (main scanning direction) or the SUB (sub scanning direction) button.
- 2) Press the button of the adjustment value of the target copy mode.



This adjustment is valid when SIM46-58 Pseudo resolution setting is set to ON.

The thickness of images in the section processed by smoothing is changed.

Positive: The image in the section processed by smoothing becomes thicker.

Negative: The image in the section processed by smoothing becomes thinner.

Scanning direction	Item (copy mode)	Adjustment button	Content	Default value	NOTE
MAIN	COLOR COPY K	(-)2	Color copy For BLACK	0	Main scanning direction smoothing fine adjustment Negative (-) direction: The smoothing section becomes thinner. Positive (+) direction: The smoothing section becomes thicker.
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY C	(-)2	Color copy For CYAN	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY M	(-)2	Color copy For MAGENTA	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY Y	(-)2	Color copy For YELLOW	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	MONO COPY K	(-)2	Monochrome copy For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT K	(-)2	Color print For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT C	(-)2	Color print For CYAN	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT M	(-)2	Color print For MAGENTA	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT Y	(-)2	Color print For YELLOW	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	MONO PRINT K	(-)2	Monochrome print For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			

Scanning direction	Item (copy mode)	Adjustment button	Content	Default value	NOTE
SUB	COLOR COPY K	(-)2	Color copy For BLACK	0	Sub scanning direction smoothing fine adjustment Negative (-) direction: The smoothing section becomes thinner. Positive (+) direction: The smoothing section becomes thicker.
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY C	(-)2	Color copy For CYAN	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY M	(-)2	Color copy For MAGENTA	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR COPY Y	(-)2	Color copy For YELLOW	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	MONO COPY K	(-)2	Monochrome copy For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT K	(-)2	Color print For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT C	(-)2	Color print For CYAN	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT M	(-)2	Color print For MAGENTA	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	COLOR PRINT Y	(-)2	Color print For YELLOW	0	
		(-)1			
		0			
		(+)1			
		(+)2			
	MONO PRINT K	(-)2	Monochrome print For BLACK	0	
		(-)1			
		0			
		(+)1			
		(+)2			

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the sharpness in the color auto copy mode.

**Section****Operation/Procedure**

- 1) Select a target item with scroll keys on the touch panel.
- 2) Input numeric value corresponding to sharpness level (filter process mode).
- 3) Press [OK] key.

This is used to adjust the sharpness in the color auto copy mode and the smoothness (roughness) in the dark area.

Item/Display			Content	Setting range	Default value
A	SCREEN FILTER LEVEL	H	Sharpness (filter) adjustment of dot pattern image in auto copy mode	Strong emphasis	3 (Auto)
		L		Soft emphasis	
		AUTO		Auto	
B	CPY CL AUTO FILTER LEVEL	SOFT	Sharpness (filter) adjustment for the automatic copy mode (Text, Printed Photo / Printed Photo images)	SOFT	2 (CENTER)
		CENTER		CENTER	
		HIGH		HIGH	
C	CPY PUSH AUTO FILTER LEVEL	SOFT	Sharpness (filter) adjustment for the automatic push scan mode (Text, Printed Photo / Printed Photo images)	SOFT	2 (CENTER)
		CENTER		CENTER	
		HIGH		HIGH	
D	COLOR COPY : CMY	OFF	Soft filter applying setting to C, M, Y image in color copy mode	OFF	1 (ON)
		ON		ON	
E	COLOR COPY : K	OFF	Soft filter applying setting to K image in color copy mode	OFF	1 (ON)
		ON		ON	
F	SINGLE COLOR : CMY	OFF	Soft filter applying setting to C, M, Y image in single color copy mode	OFF	1 (ON)
		ON		ON	
G	2 COLOR COPY : CMY	OFF	Setting of YES/NO of applying the soft filter to C/M/Y images of the 2-color copy mode	OFF	1 (ON)
		ON		ON	
H	2 COLOR COPY : K	OFF	Setting of YES/NO of applying the soft filter to K images of the 2-color copy mode	OFF	1 (ON)
		ON		ON	
I	B/W COPY	OFF	Soft filter applying setting in monochrome copy mode	OFF	1 (ON)
		ON		ON	
J	COLOR PUSH : RGB	OFF	Soft filter applying setting to image in push scan color mode	OFF	1 (ON)
		ON		ON	
K	B/W PUSH	OFF	Soft filter applying setting to image in push scan monochrome mode	OFF	1 (ON)
		ON		ON	
L	COLOR PRINT: CMY*1	OFF	Setting of ON/OFF of soft filter application to color print C, M, Y images	OFF	0 (OFF)
		ON		ON	
M	COLOR PRINT: K*1	OFF	Setting of ON/OFF of soft filter application to color print K images	OFF	0 (OFF)
		ON		ON	
N	B/W PRINT*1	OFF	Setting of ON/OFF of soft filter application to monochrome print images	OFF	0 (OFF)
		ON		ON	

\*1: 18cpm/20cpm/23cpm/31cpm(G) machine: Disable

<b>46-61</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the area separation recognition level.

#### Section

#### Operation/Procedure

- 1) Select an adjustment mode.
- 2) Select a target adjustment item with scroll key on the touch panel.
- 3) Enter the adjustment value using the 10-key.
- 4) Press [OK] key.

#### Important

This must be set to the default unless any change is specially required.

When the adjustment value is set to a value greatly different from the default value, image quality trouble may occur for some documents.

Item/Display	Content
COLOR	AUTO [Color/Gray] Auto
	TPP [Color/Gray] Manual (Text print)
	COPY(TPP) [Color/Gray] Copy document (Text print)
MONO	AUTO [Monochrome] Auto
	TPP [Monochrome] Manual (Text print)
	COPY(TPP) [Monochrome] Copy document (Text print)

Item/Display	Content	Setting range	Default value
A	SEGMENT: SWITCH [TXT ON SCR]	Detection ON/OFF: Text on dot	0 - 1 0
B	SEGMENT: SWITCH [LINE SCR]	Detection ON/OFF: line screen	0 - 1 0
C	SEGMENT: SWITCH [SMALL SCR]	Detection ON/OFF: Dot in a small area	0 - 1 0
D	SEGMENT: SWITCH [HIGH LPI]	Detection ON/OFF: High line number judgment select	0 - 1 0
E	SEGMENT: SWITCH [TXT ON SCR IMAGE SEND]	Detection ON/OFF: Text on image send dots	0 - 1 0
F	SEGMENT: ADJUST [BK TXT 1]	Detection level adjustment: Black text 1	1 - 99 50
G	SEGMENT: ADJUST [CL TXT 1]	Detection level adjustment: Color text 1	1 - 99 50
H	SEGMENT: ADJUST [BK TXT 2, CL TXT 2]	Detection level adjustment: Black text 2, Color text 2	1 - 49 25
I	SEGMENT: ADJUST [TXT ON SCR 1]	Detection level adjustment: Text 1 on dots	1 - 99 50
J	SEGMENT: ADJUST [TXT ON SCR 2]	Detection level adjustment: Text 2 on dots	1 - 99 50
K	SEGMENT: ADJUST [TXT ON SCR AREA]	Detection level adjustment: Detection area of text on dots	1 - 15 8
L	SEGMENT: ADJUST [HIGH LPI]	Detection level adjustment: High line number judgment	1 - 49 25
M	SEGMENT: ADJUST [BK]	Detection level adjustment: No chrome judgment	1 - 99 50
N	SEGMENT: ADJUST [CL]	Detection level adjustment: Chrome judgment	1 - 99 50
O	SEGMENT: ADJUST [TXT ON BG]	Detection level adjustment: Text on background	1 - 99 50

Item/Display	Content	Setting range	Default value
P	SEGMENT: ADJUST [SCR 1 HIGH]	Detection level adjustment: High density dots	1 - 49 25
Q	SEGMENT: ADJUST [SCR 1 MIDDLE]	Detection level adjustment: Medium density dots	1 - 49 25
R	SEGMENT: ADJUST [SCR 1 LOW]	Detection level adjustment: Low density dots	1 - 49 25
S	SEGMENT: ADJUST [SCR 2]	Detection level adjustment: Dot 2	1 - 15 8
T	SEGMENT: ADJUST [SCR 3]	Detection level adjustment: Dot 3	1 - 15 8
U	SEGMENT: ADJUST [LINE HALFTONE]	Detection level adjustment: line screen	1 - 49 25

<b>46-62</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the operating conditions of the ACS, the area separation, the background image process, and the auto exposure mode.

#### Section

#### Operation/Procedure

- 1) Select a target adjustment item with scroll key on the touch panel.
- 2) Enter the adjustment value using the 10-key.
- 3) Press [OK] key.

#### Important

This must be set to the default unless any change is specially required.

When the adjustment value is set to a value greatly different from the default value, image quality trouble may occur for some documents.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Item/Display	Content	Setting range	Default value
A	SW_ACS	ACS judgment reference area select	0 - 1 1
B	TEXT_IMAGE	Text/Image judgment priority level adjustment	0 - 6 3
C	TEXT_BLANK	Text/Blank judgment priority level adjustment	0 - 6 4
D	HT_LV	Dot area judgment threshold value adjustment	0 - 6 1
E	AE_AREA_LV	Color AE judgment target area adjustment	0 - 6 3
F	AE_LV_CC	AE background detection division result adjustment: For color copy	0 - 8 4
G	AE_LV_MC	AE background detection division result adjustment: For monochrome copy	0 - 8 4
H	AE_LV_CS	AE background detection division result adjustment: For color scan	0 - 8 4
I	AE_LV_MS	AE background detection division result adjustment: For monochrome scan	0 - 8 4



Item/Display		Content		Setting range		Default value
J	AE_JUDGE_LV_L_U	Color AE background density threshold value adjustment (lower limit)		0 - 4		0
K	AE_JUDGE_LV_L_O	Color AE background density threshold value adjustment (upper limit)		0 - 10		0
L	AE_JUDGE_LV_C	Color AE background detection level adjustment (chroma)		0 - 10		5
M	AE_ONOFF_CC	AE mode ON/ OFF switch: For color copy	ON OFF	0 - 1	0 1	0 (ON)
N	AE_ONOFF_MC	AE mode ON/ OFF switch: For mono-chrome copy	ON OFF	0 - 1	0 1	0 (ON)
O	AE_ONOFF_CS	AE mode ON/ OFF switch : For color scan	ON OFF	0 - 1	0 1	0 (ON)
P	AE_ONOFF_MS	AE mode ON/ OFF switch : For mono-chrome copy	ON OFF	0 - 1	0 1	0 (ON)
Q	BLANK_JUDGE_LV_L	Blank judgment level adjustment (value)		0 - 10		0
R	BLANK_JUDGE_LV_C	Blank judgment level adjustment (chroma)		0 - 10		0
S	MODE0_UNDER	Mode 0 developing paper mode select		0 - 6		0
T	MODE1_UNDER	Mode 1 developing paper mode select		0 - 6		0
U	MODE5_UNDER	Mode 5 developing paper mode select		0 - 6		0
V	MODE6_UNDER	Mode 6 developing paper mode select		0 - 6		0

#### 26cpm/36cpm/31cpm(A) machine

Item/Display		Content		Setting range		Default value
A	SW_ACS	ACS judgment reference area select		0 - 1		1
B	TEXT_IMAGE	Text/Image judgment priority level adjustment		0 - 6		3
C	TEXT_BLANK	Text/Blank judgment priority level adjustment		0 - 6		4
D	HT_LV	Dot area judgment threshold value adjustment		0 - 6		1
E	AE_AREA_LV	Color AE judgment target area adjustment		0 - 6		3
F	AE_LV_CC	AE background detection division result adjustment: For color copy		0 - 8		4
G	AE_LV_MC	AE background detection division result adjustment: For monochrome copy		0 - 8		4
H	AE_LV_CS	AE background detection division result adjustment: For color scan		0 - 8		4
I	AE_LV_MS	AE background detection division result adjustment: For monochrome scan		0 - 8		4
J	AE_JUDGE_LV_L_U	Color AE background density threshold value adjustment (lower limit)		0 - 4		0
K	AE_JUDGE_LV_L_O	Color AE background density threshold value adjustment (upper limit)		0 - 10		0
L	AE_JUDGE_LV_C	Color AE background detection level adjustment (chroma)		0 - 10		5

Item/Display			Content		Setting range		Default value
M	AE_ONOFF_CC	ON OFF	AE mode ON/ OFF switch :	ON OFF	0 - 1	0 1	0 (ON)
N	AE_ONOFF_MC	ON OFF	AE mode ON/ OFF switch :	ON OFF	0 - 1	0 1	0 (ON)
O	AE_ONOFF_CS	ON OFF	AE mode ON/ OFF switch :	ON OFF	0 - 1	0 1	0 (ON)
P	AE_ONOFF_MS	ON OFF	AE mode ON/ OFF switch :	ON OFF	0 - 1	0 1	0 (ON)
Q	BLANK_JUDGE_LV_L	Blank judgment level adjustment (value)			0 - 10		0
R	BLANK_JUDGE_LV_C	Blank judgment level adjustment (chroma)			0 - 10		0
S	MODE0_UNDER	Mode 0 developing paper mode select			0 - 6		0
T	MODE1_UNDER	Mode 1 developing paper mode select			0 - 6		0
U	MODE5_UNDER	Mode 5 developing paper mode select			0 - 6		0
V	MODE6_UNDER	Mode 6 developing paper mode select			0 - 6		0
W	SW_CHANGE_MODE0	Mode 0: Mode judgment select			0 - 6		0
X	SW_CHANGE_MODE1	Mode 1: Mode judgment select			0 - 6		1
Y	SW_CHANGE_MODE2	Mode 2: Mode judgment select			0 - 6		2
Z	SW_CHANGE_MODE3	Mode 3: Mode judgment select			0 - 6		3
AA	SW_CHANGE_MODE4	Mode 4: Mode judgment select			0 - 6		4
AB	SW_CHANGE_MODE5	Mode 5: Mode judgment select			0 - 6		5
AC	SW_CHANGE_MODE6	Mode 6: Mode judgment select			0 - 6		6

46-63

#### Purpose

Adjustment/Setup

#### Function (Purpose)

Used to adjust the density in the copy low density section.

#### Section

#### Operation/Procedure

- 1) Select a target adjustment item with scroll key on the touch panel.
- 2) Enter the adjustment value using the 10-key.
- 3) Press [OK] key.

When the adjustment value is increased, reproducibility of the background and the low density image is increased. When the adjustment value is decreased, reproducibility of the background and the low density image is decreased.

Item/Display		Content	Setting range	Default value
A	COLOR COPY : TEXT/PRINTED PHOTO	Text print (color copy)	1 - 9	3
B	COLOR COPY : TEXT	Text (color copy)	1 - 9	3
C	COLOR COPY : PRINTED PHOTO	Printed photo (color copy)	1 - 9	5
D	COLOR COPY : PHOTOGRAPH	Photograph (color copy)	1 - 9	5
E	COLOR COPY : TEXT/PHOTO	Text/Photograph (color copy)	1 - 9	3
F	COLOR COPY : MAP	Map (color copy)	1 - 9	5
G	COLOR COPY : LIGHT	Light document (color density)	1 - 9	6

Item/Display		Content	Setting range	Default value
H	COLOR COPY : TEXT/PRINTED PHOTO (COPY TO COPY)	Copy document, Character print (color copy)	1 - 9	5
I	COLOR COPY : TEXT (COPY TO COPY)	Copy document, Character (color copy)	1 - 9	5
J	COLOR COPY : PRINTED PHOTO (COPY TO COPY)	Copy document, Printed photo (color copy)	1 - 9	5
K	COLOR PUSH : TEXT/PRINTED PHOTO	Text print (color PUSH)	1 - 9	3
L	COLOR PUSH : TEXT	Text (color PUSH)	1 - 9	3
M	COLOR PUSH : PRINTED PHOTO	Printed photo (color PUSH)	1 - 9	5
N	COLOR PUSH : PHOTOGRAPH	Photograph (color PUSH)	1 - 9	5
O	COLOR PUSH : TEXT/PHOTO	Text/Photograph (color PUSH)	1 - 9	3
P	COLOR PUSH : MAP	Map (color PUSH)	1 - 9	5

46-65

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the color correction table.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment mode.
- 2) Select an item (mode) to be set with the scroll key.
- 3) Enter the adjustment value using the 10-key.
- 4) Press [OK] key.

When the setting is changed, the color tone is changed. This function is used to make copies of different color tone for each copy mode.

The initial value must be set unless any special change is required.

Mode	Item/Display		Content	Setting range	Default value
COPY	A	[MANUAL] TEXT PRT	Text print	0 - 8	0
	B	[MANUAL] TEXT	Text	0 - 8	0
	C	[MANUAL] PRINTED PHOTO	Printed Photo	0 - 8	0
	D	[MANUAL] PHOTO	Photograph	0 - 8	1
	E	[MANUAL] TEXT PHOTO	Text photograph	0 - 8	1
	F	[MANUAL] MAP	Map	0 - 8	0
	G	[MANUAL] LIGHT	Pencil	0 - 8	0
	H	[MANUAL] CPT TO CPT/TXT PRT	Copy document/ Text print	0 - 8	0
	I	[MANUAL] CPT TO CPT/TEXT	Copy document/ Text	0 - 8	0
	J	[MANUAL] CPY TO CPY/PHOTO	Copy document/ Printed Photo	0 - 8	0
	K	AUTO0	Automatic mode judgment 0	0 - 8	2
	L	AUTO1	Automatic mode judgment 1	0 - 8	2

Mode	Item/Display		Content	Setting range	Default value
COPY	M	AUTO2	Automatic mode judgment 2	0 - 8	3
	N	AUTO3	Automatic mode judgment 3	0 - 8	3
	O	AUTO4	Automatic mode judgment 4	0 - 8	2
	P	AUTO5	Automatic mode judgment 5	0 - 8	2
	Q	AUTO6	Automatic mode judgment 6	0 - 8	2
PREVIEW (Preview screen)	A	[MANUAL] TEXT PRT	Text print	0 - 4	0
	B	[MANUAL] TEXT	Text	0 - 4	0
	C	[MANUAL] PRINTED PHOTO	Printed Photo	0 - 4	0
	D	[MANUAL] PHOTO	Photograph	0 - 4	1
	E	[MANUAL] TEXT PHOTO	Text photograph	0 - 4	1
	F	[MANUAL] MAP	Map	0 - 4	0
	G	[MANUAL] LIGHT	Pencil	0 - 4	0
	H	[MANUAL] CPT TO CPT/TXT PRT	Copy document/ Text print	0 - 4	0
	I	[MANUAL] CPT TO CPT/TEXT	Copy document/ Text	0 - 4	0
	J	[MANUAL] CPY TO CPY/PHOTO	Copy document/ Printed Photo	0 - 4	0
	K	AUTO0	Automatic mode judgment 0	0 - 4	2
	L	AUTO1	Automatic mode judgment 1	0 - 4	2
	M	AUTO2	Automatic mode judgment 2	0 - 4	3
	N	AUTO3	Automatic mode judgment 3	0 - 4	3
	O	AUTO4	Automatic mode judgment 4	0 - 4	2
	P	AUTO5	Automatic mode judgment 5	0 - 4	2
	Q	AUTO6	Automatic mode judgment 6	0 - 4	2

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the reproduction capability of watermarks in the copy/prINTER mode. (26cpm/36cpm/31cpm(A) machine)

**Section****Operation/Procedure**

This is to adjust the reproduction capability of watermarks in the copy/prINTER mode.

- 1) Select the adjustment mode.
- 2) Select an adjustment item according to the necessity.
- 3) Enter the adjustment value with 10-key and press [OK] key.
- 4) Make a copy, and check the adjustment result.

Item/Display			Content	Setting range	Default value	Note
PATTERN	A	WOVEN DEN BK LOW	Watermark density level (Black LOW)	0 - 255	15	<p>The adjustment value is changed to increase or decrease the density of the watermark of background documents (primary output).</p> <p>To increase the watermark density, increase the adjustment value. To decrease the watermark density, decrease the adjustment value.</p> <p><b>Important</b></p> <p>When the adjustment value is increased, the watermark area which is originally not reproduced becomes difficult to disappear. When the adjustment value is decreased, the watermark area which is originally reproduced becomes easy to disappear.</p>
	B	WOVEN DEN BK MIDDLE	Watermark density level (Black MIDDLE)	0 - 255	19	
	C	WOVEN DEN BK HIGH	Watermark density level (Black HIGH)	0 - 255	23	
	D	WOVEN DEN C LOW	Watermark density level (Cyan LOW)	0 - 255	19	
	E	WOVEN DEN C MIDDLE	Watermark density level (Cyan MIDDLE)	0 - 255	23	
	F	WOVEN DEN C HIGH	Watermark density level (Cyan HIGH)	0 - 255	27	
	G	WOVEN DEN M LOW	Watermark density level (Magenta LOW)	0 - 255	15	
	H	WOVEN DEN M MIDDLE	Watermark density level (Magenta MIDDLE)	0 - 255	18	
	I	WOVEN DEN M HIGH	Watermark density level (Magenta HIGH)	0 - 255	21	
	J	CONTRAST	Contrast adjustment	0 - 255	2	<p>This is used to adjust the variation in the watermark density when the adjustment value of the watermark print/contrast adjustment in the system setting is changed by 1.</p> <p>When this value is increased, the variation is also increased. When the value is decreased, the variation is also decreased. When the adjustment value is 0, the result of the contrast adjustment is not reflected. (* The adjustment value must be set to 1 or greater.)</p>
	K	HT TYPE (POSI)	For half-tone index watermark type positive	42 - 43	42	
	L	HT TYPE (NEGA)	For half-tone index watermark type negative	42 - 43	42	

Item/Display			Content		Setting range		Default value	Note
COPY MODE	A	TEXT/PRINTED PHOTO	Text/Printed Photo mode select Enable/Disable	OFF ON	0 - 1	0 1	1	Normally set to the default. No need to change in the market.
	B	TEXT	Text mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	C	PRINTED PHOTO	Printed Photo mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	D	PHOTOGRAPH	Photograph mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	E	TEXT/PHOTO	Text/Photograph mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	F	MAP	Map mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	G	LIGHT	Light density document mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	H	TEXT/PRINTED PHOTO (CPY TO CPY)	Copy document: Text/Printed Photo mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	I	TEXT (CPY TO CPY)	Copy document: Text mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	J	PRINTED PHOTO (CPY TO CPY)	Copy document: Printed Photo mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	K	AUTO	Automatic mode select Enable/Disable	OFF ON	0 - 1	0 1	1	
	L	DEFAULT MODE	Default exposure mode Used to specify the exposure mode set when the watermark is ON.	TEXT/ PRINTED PHOTO TEXT PRINTED PHOTO PHOTOGRAPH TEXT/PHOTO MAP	0 - 5	0 1 2 3 4 5	0	
POSITION	A	LINE SPACE 1	Line space in the watermark print box (24P - 36P)		0 - 200		20	
	B	LINE SPACE 2	Line space in the watermark print box (37P - 48P)		0 - 200		20	
	C	LINE SPACE 3	Line space in the watermark print box (49P - 64P)		0 - 200		20	
	D	LINE SPACE 4	Line space in the watermark print box (65P - 80P)		0 - 200		20	
	E	BLANK H/B 1	Upper margin/Lower margin in the watermark print box (24P - 36P)		0 - 200		10	
	F	BLANK H/B 2	Upper margin/Lower margin in the watermark print box (37P - 48P)		0 - 200		10	
	G	BLANK H/B 3	Upper margin/Lower margin in the watermark print box (49P - 64P)		0 - 200		10	
	H	BLANK H/B 4	Upper margin/Lower margin in the watermark print box (65P - 80P)		0 - 200		10	
	I	BLANK L/R 1	Left margin/Right margin in the watermark print box (24P - 36P)		0 - 200		60	
	J	BLANK L/R 2	Left margin/Right margin in the watermark print box (37P - 48P)		0 - 200		90	
	K	BLANK L/R 3	Left margin/Right margin in the watermark print box (49P - 64P)		0 - 200		120	
	L	BLANK L/R 4	Left margin/Right margin in the watermark print box (65P - 80P)		0 - 200		150	

<b>46-74</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Copy color balance adjustment (Auto adjustment)/Printer color balance adjustment (Auto adjustment)

#### Section

#### Operation/Procedure

This simulation is used to perform SIM46-24 and SIM67-24 continuously.

To perform both the copy color balance adjustment (Automatic adjustment) and the printer color balance adjustment (Automatic adjustment), use this simulation for efficient adjustment operations.

- 1) Press [EXECUTE] key, and the high density process control is performed. Then, the copy color balance adjustment pattern is printed.
- 2) Place the printed adjustment pattern on the document table, select [FACTORY] or [SERVICE] mode.
- 3) Press [EXECUTE] key, and the copy color balance adjustment is performed and the adjustment result pattern is printed.
- 4) Press [EXECUTE] key, and the printer color balance adjustment pattern is printed.
- 5) Place the printed adjustment pattern on the document table, select [FACTORY] or [SERVICE] mode.
- 6) Press [EXECUTE] key, and the printer color balance adjustment (automatic adjustment) is performed and the adjustment result pattern is printed.
- 7) Press [OK] key, and the halftone correction target is registered.
- 8) When [EXECUTE] key is displayed, press it.

When "COMPLETED THIS PROCEDURE" is displayed, the adjustment is completed.

#### Important

The adjustment result becomes effective only when the adjustment procedure for both copy and print mode have completed successfully. For example, when the copy color balance adjustment (automatic adjustment) is performed and the simulation is canceled, the adjustment result is not effective.

<b>46-90</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to set the process operation of high-compression PDF images. (26cpm/36cpm/31cpm(A) machine)

#### Section

#### Operation/Procedure

- 1) Select a target adjustment mode.
- 2) Select an adjustment target item with the scroll key.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key. The set value is saved.

Mode	Item/Display	Content	Setting range	Default value
TEXT	A GLYPH SENSITIVITY	Text handling selection	0 - 2	0
	B BG SW FOR FINDLINES	Line handling selection	0 - 1	0
	C HOR FINDLINES SW	Line detection SW (H)	0 - 2	0
	D VERT FINDLINES SW	Line detection SW (V)	0 - 2	0
	E FGColor INDEXING SEL	Text color number adjustment SW	0 - 3	0
	F FGColor INDEXING ADJ	Text color adjustment	0 - 4	2
COLOR	A LUMINANCE ADJUSTMENT	Luminance adjustment	0 - 4	2
	B CHROMA INTENT	Chroma selection	0 - 2	1
	C NEUTRAL ADJUSTMENT	Neutral adjustment	0-2	0
	D R-RATIO ADJUSTMENT	Gray scale adjustment (R)	0-1000	299
	E G-RATIO ADJUSTMENT	Gray scale adjustment (G)	0-1000	587
BG LAYER	A BG LAYER INTENT 1	Speed priority setting	0 - 2	1
	B BG LAYER INTENT 2	Image quality priority setting	0 - 2	1

<b>46-91</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the reproduction capability of black text. (26cpm/36cpm/31cpm(A) machine)

#### Section

#### Operation/Procedure

- 1) Select an item to be set with the scroll key.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key.

The adjustment value is set.

When COLOR key or MONO key is pressed, the adjustment value is set and a copy is made simultaneously.

Item	Display		Content	Description	Setting range	Default value
A	SEGMENT PARAM	COMMON	Area separation setting select	0: Other than image send mode black text emphasis (simple, high compression) 1: Image send mode black text emphasis (simple, high compression)	0 - 1	0
		SPECIAL				
B	BG: JPEG QUALITY LV [COL: COMPACT]		JPEG recompression level adjustment [Color: High compression mode]	The JPEG compression ratio of the background layer is selected. 0: Low 1: Middle 2: High	0 - 2	1
C	BG: JPEG QUALITY LV [COL: ULTRA FINE]		JPEG recompression level adjustment [Color: Ultra fine mode]		0 - 2	1
D	BG: JPEG QUALITY LV [GRY: COMPACT]		JPEG recompression level adjustment [Gray: High compression mode]		0 - 2	1
E	BG: JPEG QUALITY LV [GRY: ULTRA FINE]		JPEG recompression level adjustment [Gray: Ultra fine mode]		0 - 2	1
F	FG: TARGET AREA	TYPE0	Front ground extraction area select	0: type0	0 - 2	0
		TYPE1		1: type1		
		TYPE2		2: type2		
G	FG: TEXT DENSITY [COL]		Front ground black text density adjustment [Color]	The black text density in the front ground layer is changed. 0: Dark - 5: Default - 10: Light	0 - 10	5
H	FG: TEXT DENSITY [GRY]		Front ground black text density adjustment [Gray]		0 - 10	5
I	ULTRA FINE MODE	OFF	High compression/Ultra Fine mode select	0: High compression mode 1: Ultra fine mode	0 - 1	0

### Note

This must be set to the default unless any change is specially required.

When the adjustment value is changed greatly from the initial value, an image quality trouble may occur.

## 48

### 48-1

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the scan image magnification ratio (in the main scanning direction and the sub scanning direction).

### Section

#### Operation/Procedure

- 1) Select a target adjustment item with scroll key on the touch panel.
  - 2) Enter the set value with 10-key.
  - 3) Press [OK] key.
- The set value is saved.

When the adjustment value is increased, the image magnification ratio is increased.

A change of "1" in the adjustment value of item A, C, or E corresponds to a change of about 0.02% in the copy magnification ratio.

A change of "1" in the adjustment value of item B, D, or F corresponds to a change of about 0.1% in the copy magnification ratio.

### [RSPF]

Item/Display	Content	Setting range	Default value
A	CCD (MAIN)	SCAN main scanning magnification ratio adjustment (CCD)	1 - 99 50
B	CCD (SUB)	SCAN sub scanning magnification ratio adjustment (CCD)	1 - 99 50
C	SPF (MAIN)	RSPF document front surface magnification ratio adjustment (Main scan)	1 - 99 50
D	SPF (SUB)	RSPF document front surface magnification ratio adjustment (Sub scan)	1 - 99 50
E	SPFB (MAIN)	RSPF document back surface magnification ratio adjustment (Main scan)	1 - 99 50

Item/Display	Content	Setting range	Default value
F	SPFB (SUB)	RSPF document back surface magnification ratio adjustment (Sub scan)	1 - 99 50

### 48-5

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to correction the scan image magnification ratio (in the sub scanning direction).

### Section

#### Operation/Procedure

- 1) Select a target adjustment item with scroll key on the touch panel.
  - 2) Enter the set value with 10-key.
  - 3) Press [OK] key.
- The set value is saved.

When the image magnification ratio in the sub scanning direction is adjusted with SIM48-1, and a different magnification ratio is specified, and the image magnification ratio is not satisfactory, perform this adjustment.

When there is an error in the image magnification ratio in reduction, change the adjustment value in the high speed mode. When there is an error in the image magnification ratio in enlargement, change the adjustment value in the low speed mode.

Item/Display	Content	Setting range	Default value
A	MR (HI)	Scanner motor (High speed)	1 - 99 50
B	MR(MID)	Scanner motor (Reference speed)	1 - 99 50
C	MR(LO)	Scanner motor (Low speed)	1 - 99 50
D	SPF(HI)	Document feed (SPF) motor (High speed)	1 - 99 50
E	SPF(MID)	Document feed (SPF) motor (Reference speed)	1 - 99 50

48-6	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the rotation speed of each motor.

#### Section

#### Operation/Procedure

- 1) Select an adjustment target mode with [COLOR] [MONO] [HEAVY] keys on the touch panel.
- 2) Select a target adjustment item with scroll key on the touch panel.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key.

The set value is saved.

When the adjustment value is increased, the speed is increased, and vice versa. A change of 1 in the adjustment value corresponds to a change of about 0.1% in the speed.

#### 18cpm/20cpm/23cpm/26cpm/31cpm machine

Mode Select	Item/Display	Content	Setting range	Default value
COLOR	A	RRM	1 - 99	51
MONO				
HEAVY				
COLOR	B	DVM_K	1 - 99	45
MONO				
HEAVY				
COLOR**	C	FSM	1 - 99	38*1
HEAVY				44*2
COLOR	D	DVM_CL	1 - 99	45
HEAVY				
COLOR*	E	PFM	1 - 99	48
COLOR*	F	POM	1 - 99	50
HEAVY	E	FUSER SETTING	1 - 99	60
HEAVY	F	RRM START	0 - 255	109
HEAVY	G	RRM END	0 - 255	210

\* Common items for color, monochrome, and heavy paper

\*\* Common items for color and monochrome

The greater the correction value is, the higher the speed is, and vice versa. Change by  $\pm 1$  corresponds to 0.1%.

\*1: In the case of 20cpm machine

\*2: In the case of 23cpm machine

#### 36cpm machine

Mode	Item/Display	Content	Setting range	Default value
COLOR	A	RRM	1 - 99	51
MONO				
HEAVY				
COLOR	B	BTM	1 - 99	47
MONO				
HEAVY				
COLOR	C	DVM_K	1 - 99	45
MONO				
HEAVY				
COLOR**	D	FSM	1 - 99	Refer to the list below.
HEAVY				
COLOR	E	DVM_CL	1 - 99	45
HEAVY				

Mode	Item/Display	Content	Setting range	Default value
COLOR*	F	PFM	Paper transport motor correction value	1 - 99
COLOR*	G	POM	Paper exit motor correction value	1 - 99
HEAVY	F	FUSER SETTING	Fusing speed select timing	1 - 99
HEAVY	G	RRM START	RPM acceleration start timing	0 - 255
HEAVY	H	RRM END	RPM acceleration end timing	0 - 255

#### Default value of FSM

Item	Default value					
	26cpm/31cpm machine			36cpm machine		
	Group A	Group A	Group B	Group C	Group B	Group C
D	44	44	44	44	44	44

Group	Destination			
Group A	JAPAN	AB_B	CHINA	
Group B	U. S. A	CANADA	INCH	
Group C	EUROPE	U. K	AUS.	AB_A

#### Important

This must be set to the default unless any change is specially required.

When the adjustment value is set to a value greatly different from the default value, a jam, paper wrinkle, or image quality trouble may occur.

## 49

49-1	
<b>Purpose</b>	
<b>Function (Purpose)</b>	Used to perform the firmware update.
<b>Section</b>	

#### Operation/Procedure

- 1) Save the firmware to the USB memory.
- 2) Insert the USB memory into the main unit. (Use USB I/F of the operation panel section.)
- 3) Select a target firmware file for update with the touch panel.
- 4) Select a target firmware.  
Press [ALL] key to select all the Firmware collectively.
- 5) Press [EXECUTE] key.
- 6) Press [YES] key.

The selected firmware is updated.

When the operation is normally completed, "COMPLETE" is displayed. When terminated abnormally, "ERROR" is displayed.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

Item/Display	Content	Error display in case of abnormality
CONFIG	Configuration data	CONF
ICU (MAIN)	ICU Main section	ICUM
ICU (BOOTM)	ICU Boot section main	ICUBM
ICU (BOOTCN)	ICU Boot section CN	ICUCN
ICU (SUB)	ICU Sub section (ARM9)	ICUS
LANGUAGE	Language support data program	LANG
GRAPHIC	Graphic data for L-LCD	GRAPH
SLIST	SLIST data for L-LCD	SLIST
PCL (BOOT)	PCL Boot section	PCLB
PCL (MAIN)	PCL Main section	PCLM

Item/Display	Content	Error display in case of abnormality
PCL (CONFIG)	PCL Configuration data	PCLC
PCL (PROFILE)	PCL Color profile	PCLP
PCU (BOOT)	PCU Boot section	PCUB
PCU (MAIN)	PCU Main section	PCUM
DESK (BOOT)	Desk unit boot section	DESKB
DESK (MAIN)	Desk unit main section	DESKM
FIN (BOOT)	Inner finisher boot section	FINB
FIN (MAIN)	Inner finisher main section	FINM
SCU (BOOT)	SCU Boot section	SCUB
SCU (MAIN)	SCU Main section	SCUM
FAX (BOOT)	FAX1 Boot section	FAXB
FAX (MAIN)	FAX1 Main section	FAXM
ANIMATION	Animation data	ANIME
WEB HELP	WEB help	WEBHP

#### 26cpm/36cpm/31cpm(A) machine

Item/Display	Content	Error display in case of abnormality
CONFIG	Configuration data	CONF
ICU (MAIN)	ICU Main section	ICUM
ICU (BOOTM)	ICU Boot section main	ICUBM
ICU (BOOTCN)	ICU Boot section CN	ICUCN
ICU (SUB)	ICU Sub section (ARM9)	ICUS
LANGUAGE	Language support data program	LANG
GRAPHIC	Graphic data for L-LCD	GRAPH
UICONTENTS	Content data for display	UICON
SLIST	SLIST data for L-LCD	SLIST
EOSA	embedded OSA	EOSA
PCL (BOOT)	PCL Boot section	PCLB
PCL (MAIN)	PCL Main section	PCLM
PCL (CONFIG)	PCL Configuration data	PCLC
PCL (PROFILE)	PCL Color profile	PCLP
PCU (BOOT)	PCU Boot section	PCUB
PCU (MAIN)	PCU Main section	PCUM
DESK (BOOT)	Desk unit boot section	DESKB
DESK (MAIN)	Desk unit main section	DESKM
A4LCC (BOOT)	LCC Boot	LCC4B
A4LCC (MAIN)	LCC Main	LCC4M
FIN (BOOT)	Inner finisher boot section	FINB
FIN (MAIN)	Inner finisher main section	FINM
1KFIN (BOOT)	Saddle stitch finisher Boot	FIN1B
1KFIN (MAIN)	Saddle stitch finisher Main	FIN1M
1KPUNCH (BOOT)	Saddle punch unit Boot	1PUNB
1KPUNCH (MAIN)	Saddle punch unit Main	1PUNM
SCU (BOOT)	SCU Boot section	SCUB
SCU (MAIN)	SCU Main section	SCUM
FAXOPT1 (BOOT)	FAX1 Boot section	FXO1B
FAXOPT1 (MAIN)	FAX1 Main section	FXO1M
PDL_FONT	PDL font	PDL
ANIMATION	Animation data	ANIME
WEB HELP	WEB help	WEBHP
ACRE (BOOT)	Enhanced compression kit Boot	ACREB
ACRE (MAIN)	Enhanced compression kit Main	ACREM
ACRE_DATA	Enhanced compression kit Table	ACRED

#### List of error displays in case of abnormal end

Item/Display	Content
CONF	Configuration data
ICUM	ICU Main section former half
ICUBM	ICU Boot section main
ICUCN	ICU Boot section CN
LANG	Language support data program (General term)
GRAPH	Graphic data for L-LCD
SLIST	SLIST data for L-LCD
PCUB	PCU Boot section
PCUM	PCU Main section

Item/Display	Content
DESKB	Desk unit BOOT section
DESKM	Desk unit MAIN section
LCC4B	Side LCC (A4) Boot section
LCC4M	Side LCC (A4) main section
FINB	Inner finisher BOOT section
FINM	Inner finisher MAIN section
FIN1B	1K finisher Boot section
FIN1M	1K finisher Main section
FIN4B	4K finisher Boot section
FIN4M	4K finisher Main section
1PUNB	Punch unit Boot section for 1K finisher
1PUNM	Punch unit Main section for 1K finisher
4PUNB	Punch unit Boot section for 4K finisher
4PUNM	Punch unit Main section for 4K finisher
SCUB	SCU Boot section
SCUM	SCU Main section
FAXB	FAX1 Boot section
FAXM	FAX1 Main section
FXOPB	FAX2 Boot section (Japan only)
FXOPM	FAX2 Main section (Japan only)
ESCP	ESC/P font
PDL	PDL font
ANIME	Animation data
IMGDT	Image ASIC data
CORP	Color profile
WEBHP	WEB help
UNICD	UNICODE table
UICON	Content data for display

#### 49-3

##### Purpose

##### Function (Purpose)

Used to update the operation manual in the HDD.

##### Section

#### Operation/Procedure

- 1) Insert the USB memory into the main unit.  
\* When the USB is not inserted, "INSERT A STORAGE E-MANUAL STORED ON" is displayed. When [OK] key is pressed, the display is shifted to the folder select menu 1.
- 2) Press the folder button of the operation manual data. (The display is shifted to the operation manual update menu.)  
The current version and the update version are displayed.
- 3) Press [EXECUTE] key.  
[EXECUTE] key is highlighted, and [YES] [NO] keys becomes active from gray out.
- 4) When [YES] key is pressed, the selected operation manual is updated.  
When update is completed normally, "COMPLETE" is displayed. When terminated abnormally, "ERROR" is displayed.

#### 49-5

##### Purpose

##### Function (Purpose)

Used to perform the watermark update.

##### Section

#### Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Select the button of the folder to perform the watermark update.
- 3) The current version and the update version are displayed.
- 4) Press [EXECUTE] key.
- 5) Press [YES] key.  
The selected watermark is updated.



50-1

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Copy image position, image loss adjustment

**Section****Operation/Procedure**

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.  
Set the items other than RRCA, LEAD, and SIDE to the default.  
RRCA: Image lead edge reference position adjustment  
LEAD: Lead edge image loss adjustment  
SIDE: Side image loss adjustment
- 3) Press [OK] key. (The set value is saved.)

Item/Display		Content		Setting range	Default value
A	Lead edge adjustment value	RRCA	Document lead edge reference position (OC)	0 - 99	50
B		RRCB-CS1	Registration motor ON	1 - 99	60
C		RRCB-DSK	Standard Tray	1 - 99	60
D		RRCB-LCC	Desk	1 - 99	60
E		RRCB-MFT	LCC	1 - 99	60
F		RRCB-ADU	Manual paper feed	1 - 99	60
G	Image loss area setting value	LEAD	ADU	1 - 99	60
H		SIDE	Lead edge image loss area setting	0 - 99	40
I	Void area adjustment	DENA	Side image loss area adjustment	0 - 99	20
J		DENB	Lead edge void area adjustment	1 - 99	40
K		FRONT/REAR	Rear edge void area adjustment	1 - 99	30
L	Off-center adjustment	FRONT/REAR	FRONT/REAR void area adjustment	1 - 99	20
M	Magnification ratio correction	OFFSET_OC	OC document off-center adjustment	1 - 99	50
N	Sub scanning direction print area correction value	SCAN_SPEED_OC	SCAN sub scanning magnification ratio adjustment (CCD)	1 - 99	50
O		DENB-MFT	Manual feed correction value	1 - 99	50
P		DENB-CS1	Tray 1 correction value	1 - 99	50
Q		DENB-CS2	Tray 2 correction value	1 - 99	50
R		DENB-CS3	Tray 3 correction value	1 - 99	50
S		DENB-CS4	Tray 4 correction value	1 - 99	50
T		DENB-LCC	LCC correction value	1 - 99	50
U		DENB-ADU	ADU correction value	1 - 99	50
		DENB-HV	Heavy paper correction value	1 - 99	50

A. (RRC-A) Timing from starting document scanning to specifying the image lead edge reference is adjusted. (0.1mm/step)

- \* When the value is decreased, the timing is advanced. When the value is increased, the timing is delayed.

B - F. (RRC-B) Timing of paper (registration roller ON) for the image position on the transfer belt is adjusted. (0.1mm/step)

- \* When the value is decreased, the timing is delayed. When the value is increased, the timing is advanced.

G. (LEAD) The lead edge image loss amount is adjusted. (0.1mm/step)

- \* When the value is increased, the image loss is increased.

H. (SIDE) The side image loss amount is adjusted.

- \* When the value is increased, the image loss is increased. (0.1mm/step)

I. (DEN-A) The paper lead edge void amount is adjusted. (0.1mm/step)

- \* When the value is increased, the void is increased.

J. (DEN-B) The paper rear edge void amount is adjusted. (0.1mm/step)

- \* When the value is increased, the void is increased.

K. (FRONT/REAR) The void amount on the right and left edges of paper is adjusted. (0.1mm/step)

50-2

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the copy image position and the image loss. (This simulation is a simplified version of SIM 50-1.) (18cpm/20cpm/23cpm/31cpm(G) machine)

**Section****Operation/Procedure**

- 1) Set item A (L1) and item B (L2) to 0.
- 2) Place a rule on the left edge of the document table, and make a copy at a magnification ratio of 400%.
- 3) Measure the length of L1 and L2 on the copied image in the unit of 0.1mm (referring to the figure below). Enter the adjustment values of L1 x 10 and L2 x 10. Be sure to enter the both adjustment values of L1 and L2.

L1: Distance from the lead edge of the copied image to 10mm scale.

L2: Distance from the paper lead edge to the copy image lead edge.

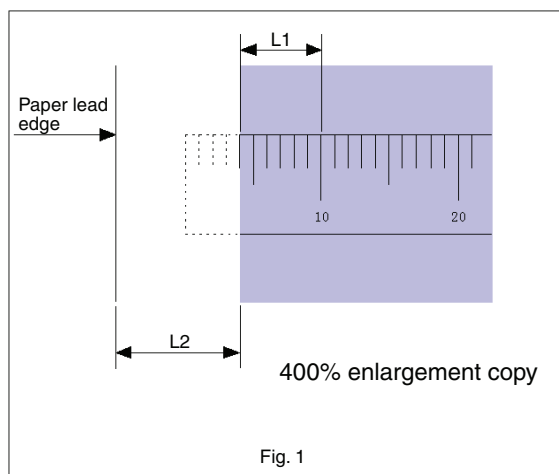


Fig. 1

- 4) Press [EXECUTE] key. (The set value is saved.)
- 5) Make a copy at the magnification ratio of 100%, and adjust the rear edge void.

Item/Display			Description	Setting range	Default value
A	Actual measurement value	L1	Distance from the image lead edge to the scale of 10mm. (Platen 400%, 0.1mm increment)	0 - 999	-
B		L2	Distance from the paper lead edge to the image lead edge (0.1mm increment)	0 - 999	0
C	Image loss area setting value	LEAD	Lead edge image loss amount setting (When the adjustment value is increased, the image loss is increased.)	0 - 99	40
D		SIDE	Side edge image loss amount setting (When the adjustment value is increased, the image loss is increased.)	0 - 99	20
E	Void area adjustment	DENA	Lead edge void area adjustment (When the adjustment value is increased, the void is increased.)	1 - 99	40
F		DENB	Rear edge void area adjustment (When the adjustment value is increased, the void is increased.)	1 - 99	30
G		FRONT/ REAR	FRONT/REAR void amount adjustment (When the adjustment value is increased, the void is increased.)	1 - 99	20

Same as the adjusted items of SIM50-01 except for A and B.

The values adjusted with A and B are reflected to the document lead edge reference position (RRC-A) of SIM50-01 and all the paper lead edge positions (RRCB-\*\*).

All adjustment items: 1 step = 0.1mm change

50-5	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the print lead edge image position. (PRINTER MODE)
<b>Section</b>	

#### Operation/Procedure

- 1) Select a target adjustment item (DEN-C) with scroll key on the touch panel.
- 2) Enter the adjustment value using the 10-key.
- 3) Press [EXECUTE] key.  
The set value is saved, and the adjustment check pattern is printed.
- 4) Measure the distance from the paper lead edge the adjustment pattern to the image lead edge, and check to confirm that it is in the standard adjustment value range.  
Standard reference value: 4.0±2.0mm

When the adjustment value is increased, the distance from the paper lead edge to the image lead edge is increased. When the adjustment value is decreased, the distanced is decreased.

When the set value is changed by 1, the distance is changed by about 0.1mm.

Item/Display			Content	Setting range	Default value	NOTE	
A	DEN-C		Used to adjust the print lead edge image position. (PRINTER MODE)	1 - 99	30	Adjustment value too align the print lead edge for the printer. When the adjustment value of this item is decreased by 1, the printer print start position in the paper transport direction is shifted to the lead edge by 0.1mm.	
B	DEN-B		Rear edge void area adjustment	1 - 99	30	Void amount generated at the paper rear edge. When the adjustment value of item B (DEN-B) is decreased by 1, the print area adjustment value in the sub scanning direction for the paper transport direction is decreased by 0.1mm.	
C	FRONT/REAR		FRONT/REAR void area adjustment	1 - 99	20	Adjustment of the void amount generated on the left and right edges of paper. When the adjustment value is increased, the void amount is increased.	
D	DENB-MFT		Manual feed rear edge void area adjustment correction value	1 - 99	50	Fine adjustment value of each paper feed source for the adjustment value of DEN-B	
E	DENB-CS1		Tray 1 rear edge void area adjustment correction value	1 - 99	50		
F	DENB-CS2		Tray 2 rear edge void area adjustment correction value	1 - 99	50		
G	DENB-CS3		Tray 3 rear edge void area adjustment correction value	1 - 99	50		
H	DENB-CS4		Tray 4 rear edge void area adjustment correction value	1 - 99	50		
I	DENB-LCC		LCC rear edge void aria adjustment correction value	1 - 99	50		
J	DENB-ADU		ADU rear edge void aria adjustment correction value	1 - 99	55		
K	DENB-HV		Heavy paper correction value	1 - 99	50		
L	MULTI COUNT		Number of print	1 - 999	1	Adjustment pattern print conditions setting	
M	PAPER	MFT	Tray selection	1 - 6	1	2 (CS1)	
		CS1	Manual paper feed		2		
		CS2	Tray 1		3		
		CS3	Tray 2		4		
		CS4	Tray 3		5		
		LCC	Tray 4		6		
N	DUPLEX	YES	Duplex print selection	0 - 1	0	1 (NO)	
		NO	No		1		

When the adjustment value is increased, the distance from the paper lead edge to the image lead edge is increased. When the adjustment value is decreased, the distance from the paper lead edge to the image lead edge is decreased.

When the set value is changed by 1, the distance is changed by about 0.1mm.

<b>50-6</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the copy image position and the image loss. (RSPF mode)
<b>Section</b>	RSPF

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

#### [RSPF]

Item/Display		Content	Setting range	Default value
A	SIDE1	Front surface document scan position adjustment (CCD)	1 - 99	50
B	SIDE2	Back surface document scan position adjustment (CCD)	1 - 99	50
C	Image loss amount setting SIDE1	LEAD_EDGE (SIDE1) Front surface lead edge image loss amount setting	0 - 99	20
D	Image loss amount setting SIDE1	FRONT_REAR (SIDE1) Front surface side image loss amount setting	0 - 99	20
E	Image loss amount setting SIDE1	TRAIL_EDGE (SIDE1) Front surface rear edge image loss amount setting	0 - 99	40
F	Image loss amount setting SIDE2	LEAD_EDGE (SIDE2) Back surface lead edge image loss amount setting	0 - 99	20
G	Image loss amount setting SIDE2	FRONT_REAR (SIDE2) Back surface side image loss amount setting	0 - 99	20
H	Image loss amount setting SIDE2	TRAIL_EDGE (SIDE2) Back surface rear edge image loss amount setting	0 - 99	40
I	OFFSET_SPF1	SPF front surface document off-center adjustment	1 - 99	50
J	OFFSET_SPF2	SPF back surface document off-center adjustment	1 - 99	50
K	SCAN_SPEED_SPF1	RSPF document front surface magnification ratio (Sub scan)	1 - 99	50
L	SCAN_SPEED_SPF2	RSPF document back surface magnification ratio (Sub scan)	1 - 99	50

Item A, B: When the adjustment value is increased, the scan timing is delayed.

Item C - H: When the adjustment value is increased, the image loss is increased.

Item E - H: When a shadow image appears on the rear edge, increase the adjustment value to delete the shadow.

All adjustment items: 1 step = 0.1mm change

<b>50-7</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the copy image position and the image loss (RSPF mode). (This simulation is a simplified version of SIM 50-6.) (18cpm/20cpm/23cpm/31cpm(G) machine)
<b>Section</b>	RSPF

#### Operation/Procedure

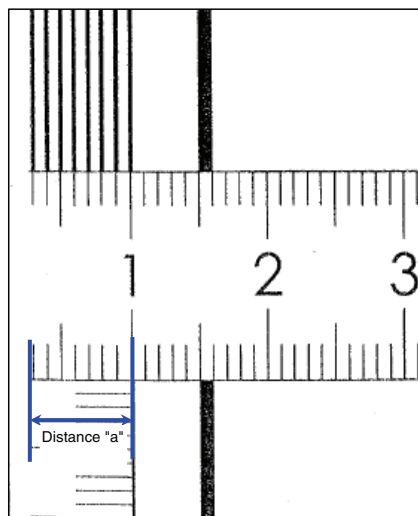
- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Set item A (L4) and item B (L5) to 0.
- 3) Set the magnification ratio to 200%, and make a copy in the RSPF duplex mode.

- 4) Measure the size of the printed image. Enter the actual measurement value of distance a (RSPF) to L4 and L5 in the unit of 0.1mm.

(Adjustment value "1" for 0.1mm)

L4: Distance a (RSPF front surface: 200%) (unit: 0.1mm)

L5: Distance a (RSPF back surface: 200%) (unit: 0.1mm)



- 5) Press [EXECUTE] key. (The set value is saved.)

#### [RSPF]

Item/Display		Content	Setting range	Default value
A	L4	Distance (SPF 200%, 0.1mm unit) from the front surface image lead edge to the scale of 10mm.	0 - 999	-
B	L5	Distance (SPF 200%, 0.1mm unit) from the back surface image lead edge to the scale of 10mm.	0 - 999	-
C	LEAD_EDGE (SIDE1)	Front surface lead edge image loss amount setting	0 - 99	20
D	FRONT_REAR (SIDE1)	Front surface side image loss amount setting	0 - 99	20
E	TRAIL_EDGE (SIDE1)	Front surface rear edge image loss amount setting	0 - 99	40
F	LEAD_EDGE (SIDE2)	Back surface lead edge image loss amount setting	0 - 99	20
G	FRONT_REAR (SIDE2)	Back surface side image loss amount setting	0 - 99	20
H	TRAIL_EDGE (SIDE2)	Back surface rear edge image loss amount setting	0 - 99	40

Item C - H: When the adjustment value is increased, the image loss is increased.

All adjustment items: 1 step = 0.1mm change

Items C - H are linked with items C - H of SIM50-06.

<b>50-10</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the black print image magnification ratio and the off-center position. (The adjustment is made separately for each paper feed section.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key. (The set value is saved.)

Item/Display		Content		Setting range		Default value	NOTE
A	BK-MAG	Main scan print magnification ratio BK		60 - 140		110	Adjustment Item List
B	MAIN-MFT	Print off center adjustment value (Manual paper feed)		1 - 99		50	
C	MAIN-CS1	Print off center adjustment value (Tray 1)		1 - 99		52	
D	MAIN-CS2	Print off center adjustment value (Tray 2)		1 - 99		52	
E	MAIN-CS3	Print off center adjustment value (Tray 3)		1 - 99		52	
F	MAIN-CS4	Print off center adjustment value (Tray 4)		1 - 99		52	
G	MAIN-LCC	Print off center adjustment value (Large capacity tray)		1 - 99		52	
H	MAIN-ADU	Print off center adjustment value (Duplex)		1 - 99		42	Adjustment Item List
		<div>Important</div> If the adjustment items A - G are not properly adjusted, this adjustment cannot be executed properly.					
I	SUB-MFT	Registration motor ON timing adjustment	Manual paper feed	1 - 99		60	
J	SUB-CS1		Standard cassette	1 - 99		60	
K	SUB-DSK		DESK	1 - 99		60	
L	SUB-LCC		LCC	1 - 99		60	
M	SUB-ADU		ADU	1 - 99		60	
N	MULTI COUNT	Number of print		1 - 999		1	Adjustment pattern print conditions setting
O	PAPER	MFT	Tray selection	Manual paper feed	1 - 6	1	
						2	
						3	
						4	
						5	
						6	
P	DUPLEX	YES	Duplex print selection	Yes	0 - 1	0	
		NO		No		1	

Item A: When the set value is increased, the BK image magnification ratio in the main scanning direction is increased. When the set value is decreased, the image magnification ratio is decreased.

Item B - H: When the adjustment value is increased, it is shifted to the front frame side. When the adjustment value is decreased, it is shifted to the rear frame side.

All adjustment items: 1 step = 0.1mm change

<b>50-12</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to perform the scan image off-center position adjustment. (The adjustment is made separately for each scan mode.)
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image position is shifted to the rear frame side. When the adjustment value is decreased, it is shifted to the front frame side.

1step = 0.1mm

Item/Display		Content	Setting range	Default value
A	OC	Document table image off-center adjustment	1 - 99	50
B	SPF (SIDE1)	SPF front surface image off-center adjustment	1 - 99	50
C	SPF (SIDE2)	SPF back surface image off-center adjustment	1 - 99	50

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Image registration adjustment (Main scanning direction)

**Section****Operation/Procedure**

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [EXECUTE] key. (The set value is saved.)

Item/Display		Content	Setting range	Default value						
				18cpm/ 20cpm/ 23cpm machine	26cpm/ 31cpm/ 36cpm machine					
A	CYAN(FRONT)	Registration adjustment value main scanning direction CYAN F side	1 - 199	100						
B	CYAN(REAR)	Registration adjustment value main scanning direction CYAN R side	1 - 199	100						
C	MAGENTA(FRONT)	Registration adjustment value main scanning direction MAGENTA F side	1 - 199	100						
D	MAGENTA(REAR)	Registration adjustment value main scanning direction MAGENTA R side	1 - 199	100						
E	YELLOW(FRONT)	Registration adjustment value main scanning direction YELLOW F side	1 - 199	100						
F	YELLOW(REAR)	Registration adjustment value main scanning direction YELLOW R side	1 - 199	100						
G	CYAN(SUB)	Registration adjustment value sub scanning direction CYAN (Black drum reference)	1 - 199	100						
H	MAGENTA(SUB)	Registration adjustment value sub scanning direction MAGENTA (Black drum reference)	1 - 199	100						
I	YELLOW(SUB)	Registration adjustment value sub scanning direction YELLOW (Black drum reference)	1 - 199	100						
J	OFFSET_C_F	Registration adjustment value main scanning direction offset value CYAN (FRONT)	1 - 99	50						
K	OFFSET_C_R	Registration adjustment value main scanning direction offset value CYAN (REAR)	1 - 99	50						
L	OFFSET_M_F	Registration adjustment value main scanning direction offset value MAGENTA (FRONT)	1 - 99	50						
M	OFFSET_M_R	Registration adjustment value main scanning direction offset value MAGENTA (REAR)	1 - 99	50						
N	OFFSET_Y_F	Registration adjustment value main scanning direction offset value YELLOW (FRONT)	1 - 99	50						
O	OFFSET_Y_R	Registration adjustment value main scanning direction offset value YELLOW (REAR)	1 - 99	50						
P	OFFSET_C_S	Registration adjustment value sub scanning direction offset value CYAN	1 - 99	49	50					
Q	OFFSET_M_S	Registration adjustment value sub scanning direction offset value MAGENTA	1 - 99	49	47					
R	OFFSET_Y_S	Registration adjustment value sub scanning direction offset value YELLOW	1 - 99	49	48					
S	MULTICOUNT	Number of print	1 - 999	1						
T	PAPER	MFT	Tray selection	Manual paper feed	1 - 6	1	2 (CS1)			
									Tray 1	2
									Tray 2	3
									Tray 3	4
									Tray 4	5
									LCC	6
									U	DUPLEX
NO	No	1								

<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the image registration. (Main scan direction, sub scan direction) (Auto adjustment)/OPC drum phase adjustment (Auto adjustment)
<b>Section</b>	

**Operation/Procedure**

1) Press [EXECUTE] key.

The adjustment is automatically performed, and the adjustment data are displayed.

**Note**

The contents of the following list are mainly used by the technical division, and are not necessary for the market.

Item/Display		Content	Display	Default value	NOTE
MAIN F	C	Image registration adjustment value (Main scanning direction) (Position of writing by cyan laser is F side)	1.0 - 199.0	100	
	M	Image registration adjustment value (Main scanning direction) (Position of writing by magenta laser is F side)	1.0 - 199.0	100	
	Y	Image registration adjustment value (Main scanning direction) (Position of writing by yellow laser is F side)	1.0 - 199.0	100	
MAIN R	C	Image registration adjustment value (Main scanning direction) (Position of writing by cyan laser is R side)	1.0 - 199.0	100	
	M	Image registration adjustment value (Main scanning direction) (Position of writing by magenta laser is R side)	1.0 - 199.0	100	
	Y	Image registration adjustment value (Main scanning direction) (Position of writing by yellow laser is R side)	1.0 - 199.0	100	
SUB	C	Image registration adjustment value (Sub scanning direction) (Cyan drum to black drum)	1.0 - 199.0	100	
	M	Image registration adjustment value (Sub scanning direction) (Magenta drum to cyan drum)	1.0 - 199.0	100	
	Y	Image registration adjustment value (Sub scanning direction) (Yellow drum to magenta drum)	1.0 - 199.0	100	
SKEW	C	Calculated result of print skew amount (Cyan)	-99.9 - 99.9	-	If the value is plus, R is displayed to left side of numerical value. If the value is minus, L is displayed to left side of numerical value. When the value is -4 - +4, "(OK)" is place at the back of the value. For the other cases, "(NG)" is displayed. *1
	M	Calculated result of print skew amount (magenta)	-99.9 - 99.9	-	
	Y	Calculated result of print skew amount (yellow)	-99.9 - 99.9	-	
PHASE	Phase adjustment value BK → CL	Angle step 0°(1) → 45°(2) → 90°(3) → 135°(4) → 180°(5) → 225°(6) → 270°(7) → 315°(8)	1 - 8	2	Same item as SIM44-31.
	Phase adjustment value C			2	Same item as SIM44-31. (50-sheet machine)
	Phase adjustment value M			4	
	Phase adjustment value Y			5	

Item/Display			Content	Setting range (unit)	Color/History	Default value	NOTE
MAIN F	-	REG_M_F (VALUE)	Registration adjustment correction amount main scanning direction F	1.0 - 199.0 ( $\pm 0.1$ )	CMY/-	100	
	( )	REG_M_F (DIF)	Registration value correction amount from the previous one, main scanning F	-199.0 - 199.0 ( $\pm 0.1$ )	CMY/-	0	
MAIN R	-	REG_M_R (VALUE)	Registration adjustment correction value, main scanning direction R	1.0 - 199.0 ( $\pm 0.1$ )	CMY/-	100	
	( )	REG_M_R (DIF)	Registration value correction amount from the previous one, main scanning R	-199.0 - 199.0 ( $\pm 0.1$ )	CMY/-	0	
SUB	-	REG_SUB (VALUE)	Registration adjustment correction value, sub scanning direction	1.0 - 199.0 ( $\pm 0.1$ )	CMY/-	100	
	( )	REG_SUB (DIF)	Registration value correction amount from the previous one, sub scanning	-199.0 - 199.0 ( $\pm 0.1$ )	CMY/-	0	
SKEW	CMY	SKEW_CLC	SKEW adjustment rotating direction and the number of clicks (CMY)	L99.9 - R99.9 ( $\pm 0.1$ )	KCMY/-	0	If the value is plus, L is displayed to left side of numerical value. If the value is minus, R is displayed to left side of numerical value. When the value is -2.1 - +2.1, "(OK)" is place at the back of the value. For the other cases, "(NG)" is displayed. *1
	ALL_ROTATE		SKEW adjustment rotating direction and the number of clicks (K)				If the value is plus, L is displayed to left side of numerical value. If the value is minus, R is displayed to left side of numerical value. When the value is -1.6 - +1.6, "(OK)" is place at the back of the value. For the other cases, "(NG)" is displayed. *2
PHASE		PHASE_ADJ	Phase adjustment value (1: Value of this time, 2: Value of the previous time) Angle step 0° (1) → 45° (2) → 90° (3) → 135° (4) → 180° (5) → 225° (6) → 270° (7) → 315° (8)	1 - 8 ( $\pm 1$ )	-/2	1	-

\*1: The color image skew adjustment is performed according to this display value.

When "R" is displayed in front of the value, turn and click the skew adjustment screw (LSU) clockwise by the value.

When "L" is displayed in front of the value, turn and click the skew adjustment screw (LSU) counterclockwise by the value.

\*2: The color image skew adjustment is performed according to this display value.

When "R" is displayed at the head of the value, turn the skew adjustment screw (LSU) clockwise by the number of the value.

When "L" is displayed at the head of the value, turn the skew adjustment screw (LSU) counterclockwise by the number of the value.

At that time, the values under the decimal point are rounded.

#### Error displays in case of abnormal end

	Error code	Error display	Error content	Description
Forcible end error	-	SUSPENDED	Door open end	Door open during operation
	-	SUSPENDED	CA end	CA button pressed during operation
	-	-	OFF end	Unconfirmed operation during operation (Power OFF)
Basic error	1	TONNER EMPTY	Toner Empty	BK or ALL Color toner EMPTY detection
	2	BEFOR BEHAVIOR	Other condition	Other condition
	4	SENSOR CALIBLATION F	Calibration error F	The target is not reached by 3 times of retry of F or R
	5	SENSOR CALIBLATION R	Calibration error R	
	6	SENSOR CALIBLATION FR	Calibration error FR	
	7	TIME OVER	Time error	No data are obtained for 90sec from data acquisition
	8	PROCESS CONTROL	Process control error	Process control error detection
Sub scanning adjustment error	10 - 47	SUB XXX XXXX XXX		
Main scanning adjustment error	50 - 88	MAIN XXX XXXX XXX		
Others	99	OTHER 99	Other errors	Other errors



<b>50-24</b>	
<b>Purpose</b>	(This simulation is normally not used in the market.)
<b>Function (Purpose)</b>	Used to display the detail data of SIM 44-2, 50-20, 21 and 22.
<b>Section</b>	
<b>Operation/Procedure</b>	

#### Note

This simulation is mainly used by the technical division, and is not necessary for the market.

<b>50-27</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to perform the image loss adjustment of scanned images in the FAX or image send mode.
<b>Section</b>	
<b>Operation/Procedure</b>	

- 1) Select a target adjustment mode with [FAX] or [SCANNER] key.
- 2) Select an adjustment target item with scroll key on the touch panel.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key. (The set value is saved.)

#### [RSPF]

Item/Display				Content	Setting range	Default value
FAX send	A	Image loss amount setting OC	LEAD_EDGE (OC)	OC lead edge image loss amount setting	0 - 100	30 (3mm)
	B		FRONT_REAR (OC)	OC side image loss amount setting	0 - 100	20 (2mm)
	C		TRAIL_EDGE (OC)	OC rear edge image loss amount setting	0 - 100	20 (2mm)
	D	Image loss amount setting SPF SIDE1	LEAD_EDGE (SPF_SIDE1)	Front surface lead edge image loss amount setting	0 - 100	20 (2mm)
	E		FRONT_REAR (SPF_SIDE1)	Front surface side image loss amount setting	0 - 100	20 (2mm)
	F		TRAIL_EDGE (SPF_SIDE1)	Front surface rear edge image loss amount setting	0 - 100	30 (3mm)
	G	Image loss amount setting SPF SIDE2	LEAD_EDGE (SPF_SIDE2)	Back surface lead edge image loss amount setting	0 - 100	20 (2mm)
	H		FRONT_REAR (SPF_SIDE2)	Back surface side image loss amount setting	0 - 100	20 (2mm)
	I		TRAIL_EDGE (SPF_SIDE2)	Back surface rear edge image loss amount setting	0 - 100	30 (3mm)
When image send mode (Except for FAX and copy)	A	Image loss amount setting OC	LEAD_EDGE (OC)	OC lead edge image loss amount setting	0 - 100	0 (0mm)
	B		FRONT_REAR(OC)	OC side image loss amount setting	0 - 100	0 (0mm)
	C		TRAIL_EDGE(OC)	OC rear edge image loss amount setting	0 - 100	0 (0mm)
	D	Image loss amount setting SPF SIDE1	LEAD_EDGE (SPF_SIDE1)	Front surface lead edge image loss amount setting	0 - 100	0 (0mm)
	E		FRONT_REAR (SPF_SIDE1)	Front surface side image loss amount setting	0 - 100	0 (0mm)
	F		TRAIL_EDGE(SPF_SIDE1)	Front surface rear edge image loss amount setting	0 - 100	0 (0mm)
	G	Image loss amount setting SPF SIDE2	LEAD_EDGE (SPF_SIDE2)	Back surface lead edge image loss amount setting	0 - 100	0 (0mm)
	H		FRONT_REAR (SPF_SIDE2)	Back surface side image loss amount setting	0 - 100	0 (0mm)
	I		TRAIL_EDGE(SPF_SIDE2)	Back surface rear edge image loss amount setting	0 - 100	0 (0mm)

A-I: When the adjustment value is increased, the image loss is increased.

1step = 0.1mm

<b>50-28</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to automatically adjust the image loss, void area, image off-center, and image magnification ratio.

#### Section

#### Operation/Procedure

The following adjustment items can be executed automatically with SIM50-28.

- \* ADJ16 Print image position, image magnification ratio, void area, off-center adjustments (Manual adjustments)
  - \* ADJ 17 Scan image magnification ratio adjustment (Manual adjustment)
  - \* ADJ 18 Scan image off-center adjustment (Manual adjustment)
  - \* ADJ 19 Used to adjust the copy image position and the image loss (Manual adjustments)
- 1) Select an adjustment item with the menu button.
  - 2) Press [EXECUTE] key, and the adjustment pattern is printed.
  - 3) Set the adjustment pattern on the document table.
  - 4) Press [EXECUTE] key, and the adjustment pattern is scanned.
  - 5) Press [OK] key.

Item/Display		Content		Section
OC ADJ	MFT	Document lead edge	Image loss off-center sub scanning direction image magnification ratio adjustment (Document table mode)	Scanner
	CS1			
	CS2			
	ADU	Document off-center		
	CS3			
	CS4	Sub scanning magnification ratio		
	LCC			

Item/Display				Content		Section
SPF ADJ (RSPF)	ALL	SIDE1 (Front surface)	MFT	Document lead edge	Image loss off-center sub	Scanner
		SIDE2 (Back surface)	CS1	Document	scanning	
			CS2	off-center	direction	
			ADU	Sub	image	
			CS3	scanning	magnifica-	
			CS4	magnifica-	ratio	
			LCC	tion ratio	adjustment	
			Document	(RSPF mode)		
	lead edge					
	Document					
	off-center					
	Sub					
	scanning					
	magnifica-					
	tion ratio					

Item/Display				Content		Section
SETUP/ PRINT ADJ	ALL	LEAD	MFT	Print off center Print lead edge	Print lead edge adjustment, image off- center (each paper feed tray, duplex mode) adjustment	Engine
			CS1			
			CS2			
		OFFSET	ADU			
			CS3			
			CS4			
			LCC			

Item/Display		Content		Section
BK-MAG ADJ	MFT	BK main scanning magnification ratio	Main scanning direction image magnification ratio adjustment	Engine
	CS1			
	CS2			
	ADU			
	CS3			
	CS4			
	LCC			

RESULT	Adjustment result display
DATA	Adjustment operation data display

## 51

<b>51-1</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the ON/OFF timing of the secondary transport voltage.

#### Section

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

When the adjustment value is decreased, the transfer ON/OFF timing for the paper is advanced. When the adjustment value is increased, the timing is delayed.

When the adjustment value is changed by 1, the timing is changed by about 10ms. The setting range is -490 - +490ms.

Item/Display		Content	Default value
A	TC2 ON TIMING	Secondary transfer voltage ON timing setting	50
B	TC2 OFF TIMING	Secondary transfer voltage OFF timing setting	60

<b>51-2</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the contact pressure (deflection amount) on paper by the main unit and the RSPF registration roller. (This adjustment is performed when there is a considerable variation in the print image position on the paper or when paper jams frequently occur.)

#### Section

#### Operation/Procedure

- 1) (When RSPF model)  
Select a target adjustment mode with [SIDE1] or [SIDE2] or [ENGINE] keys.
- 2) Select a target item to be adjusted with scroll keys.
- 3) Enter the set value with 10-key.
- 4) Press [OK] key. (The set value is saved.)

**[RSPF]**

Mode	Display/lte		Content		Setting range	Default value			
						18cpm/ 20cpm machine	23cpm machine	26cpm/ 31cpm machine	36cpm machine
SIDE1	A	NORMAL_PLAIN_HIGH	RSPF front surface document deflection amount adjustment value (Normal/Plain paper/HIGH)	-	1 - 99	50	50	50	50
	B	NORMAL_PLAIN_LOW	RSPF front surface document deflection amount adjustment value (Normal/Plain paper/LOW)	-	1 - 99	50	50	50	50
	C	NORMAL_THIN_HIGH	RSPF front surface document deflection amount adjustment value (Normal/Thin paper/HIGH)	-	1 - 99	50	50	50	50
	D	NORMAL_THIN_LOW	RSPF front surface document deflection amount adjustment value (Normal/Thin paper/LOW)	-	1 - 99	50	50	50	50
	E	RANDOM_PLAIN_HIGH	RSPF front surface document deflection amount adjustment value (Random/Plain paper/HIGH)	-	1 - 99	50	50	50	50
	F	RANDOM_PLAIN_LOW	RSPF front surface document deflection amount adjustment value (Random/Plain paper/LOW)	-	1 - 99	50	50	50	50
	G	RANDOM_THIN_HIGH	RSPF front surface document deflection amount adjustment value (Random/Thin paper/HIGH)	-	1 - 99	50	50	50	50
	H	RANDOM_THIN_LOW	RSPF front surface document deflection amount adjustment value (Random/Thin paper/LOW)	-	1 - 99	50	50	50	50
SIDE2	A	NORMAL_PLAIN_HIGH_1	RSPF back surface document deflection amount adjustment value 1 (Normal/Plain paper/HIGH)	-	1 - 99	50	50	50	50
	B	NORMAL_PLAIN_LOW_1	RSPF back surface document deflection amount adjustment value 1 (Normal/Plain paper/LOW)	-	1 - 99	50	50	50	50
ENGINE	A	TRAY1(S)	Main unit cassette 1 (Upper stage)/ deflection adjustment value (Plain paper/Small size)	LT size (216mm) or less	1 - 99	30	30	30	30
	B	TRAY1(L)	Main unit cassette 1 (Upper stage)/ deflection adjustment value (Plain paper/Large size)	LT size (216mm) or above	1 - 99	30	30	30	30
	C	TRAY1 HEAVY PAPER (S)	Main unit cassette 1 (Upper stage)/ deflection adjustment value (Heavy paper/Small size)	LT size (216mm) or less	1 - 99	40	10	10	2
	D	TRAY1 HEAVY PAPER (L)	Main unit cassette 1 (Upper stage)/ deflection adjustment value (Heavy paper/Large size)	LT size (216mm) or above	1 - 99	40	10	10	2
	E	TRAY2(S)	Main unit cassette 2 (Lower stage)/ deflection adjustment value (Plain paper/Small size)	LT size (216mm) or less	1 - 99	30	30	30	30
	F	TRAY2(L)	Main unit cassette 2 (Lower stage)/ deflection adjustment value (Plain paper/Large size)	LT size (216mm) or above	1 - 99	30	30	30	30
	G	TRAY2 HEAVY PAPER (S)	Main unit cassette 2 (Upper stage)/ deflection adjustment value (Heavy paper/Small size)	LT size (216mm) or less	1 - 99	40	10	10	2
	H	TRAY2 HEAVY PAPER (L)	Main unit cassette 2 (Upper stage)/ deflection adjustment value (Heavy paper/Large size)	LT size (216mm) or above	1 - 99	40	10	10	2
	I	MANUAL PLAIN PAPER (S)	Manual feed tray/deflection adjustment value (Plain paper/Small size)	LT size (216mm) or less	1 - 99	30	30	30	30
	J	MANUAL PLAIN PAPER (L)	Manual feed tray/deflection adjustment value (Plain paper/Large size)	LT size (216mm) or above	1 - 99	30	30	30	30
	K	MANUAL HEAVY PAPER (S)	Manual feed tray/deflection adjustment value (Heavy paper/Small size)	LT size (216mm) or less	1 - 99	40	10	10	2
	L	MANUAL HEAVY PAPER (L)	Manual feed tray/deflection adjustment value (Heavy paper/Large size)	LT size (216mm) or above	1 - 99	40	10	10	2
	M	MANUAL OHP	Manual feed tray/deflection adjustment value (OHP)	-	1 - 99	40	10	10	2
	N	MANUAL ENV	Manual feed tray/deflection adjustment value (Envelope)	-	1 - 99	40	10	10	2
	O	ADU PLAIN PAPER (S)	ADU/deflection adjustment value (Plain paper/Small size)	LT size (216mm) or less	1 - 99	30	30	30	30

Mode	Display/lte		Content		Setting range	Default value			
						18cpm/ 20cpm machine	23cpm machine	26cpm/ 31cpm machine	36cpm machine
ENGINE	P	ADU PLAIN PAPER (L)	ADU/deflection adjustment value (Plain paper/Large size)	LT size (216mm) or above	1 - 99	30	30	30	30
	Q	ADU HEAVY PAPER (S)	ADU/deflection adjustment value (Heavy paper/Small size)	LT size (216mm) or less	1 - 99	40	10	10	2
	R	ADU HEAVY PAPER (L)	ADU/deflection adjustment value (Heavy paper/Large size)	LT size (216mm) or above	1 - 99	40	10	10	2
	S	DESK (S)	DESK/deflection adjustment value (Plain paper/Small size)	LT size (216mm) or less	1 - 99	30	30	30	30
	T	DESK (L)	DESK/deflection adjustment value (Plain paper/Large size)	LT size (216mm) or above	1 - 99	30	30	30	30
	U	DESK HEAVY PAPER (S)	DESK/deflection adjustment value (Heavy paper/Small size)	LT size (216mm) or less	1 - 99	40	10	10	2
	V	DESK HEAVY PAPER (L)	DESK/deflection adjustment value (Heavy paper/Large size)	LT size (216mm) or above	1 - 99	40	10	10	2
	W	A4LCC	A4LCC/deflection adjustment value	-	1 - 99	30	30	30	30

#### Note on "Large size" and "Small size"

Small size: The paper length in the transport direction is shorter than the LT size (216mm).

Large size: The paper length in the transport direction is longer than the LT size (216mm).

#### Adjustment value

When the adjustment value is increased, the warp amount is increased. When the adjustment value is decreased, the warp amount is decreased.

(When the adjustment value is changed by 1, the stop timing is changed by 0.1mm.)

## 53

53-6	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the detection level of the RSPF document width.
<b>Section</b>	

#### Operation/Procedure

- 1) Open the RSPF paper feed guide to the maximum width.
- 2) Press [EXECUTE] key.  
The maximum width detection level is recognized.
- 3) Open the RSPF paper feed guide to the A4R width.
- 4) Press [EXECUTE] key.  
The A4R width detection level is recognized.
- 5) Open the RSPF paper feed guide to the A5R width.
- 6) Press [EXECUTE] key.  
The A5R width detection level is recognized.
- 7) Open the RSPF paper feed guide to the minimum width.
- 8) Press [EXECUTE] key.  
The minimum width detection level is recognized.

When the above operation is not performed normally, "ERROR" is displayed and. When the above operation is completed normally, "COMPLETE" is displayed.

1	TRAYVOLMAX	Tray size volume maximum value
2	TRAYVOLA4R	Tray volume A4R size adjustment value
3	TRAYVOLA5R	Tray volume A5R size adjustment value
4	TRAYVOLMIN	Tray size volume minimum value

53-7	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the RSPF document size width sensor.
<b>Section</b>	

#### Operation/Procedure

- 1) Select an adjustment target item with scroll key on the touch panel.
- 2) Enter the set value with 10-key.
- 3) Press [OK] key. (The set value is saved.)

#### [RSPF]

Item/Display			Setting range	Default value
A	AD_MAX	Max. width position	0 - 1023	84
B	AD_P1	A4R width position	0 - 1023	509
C	AD_P2	A5R width position	0 - 1023	808
D	AD_MIN	Min. width position	0 - 1023	961

<b>53-8</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the document lead edge reference and the RSPF mode document scan position.

#### Section

#### Operation/Procedure

Select an adjustment item with [AUTO] [MANUAL] key.

<AUTO: Document lead edge reference (RRCA) adjustment>(Auto adjustment)

- 1) Set a sheet of black paper of A4 or 11"x 8.5" on the document table.
- 2) Press [EXECUTE] key. (The adjustment is performed and the adjustment value is saved.)

Item/Display	Content	Setting range	Default value
MEASUREMENT DISTANCE	Document lead edge measurement distance	0-255 (0.1mm unit)	-
RRCA	Document lead edge reference position	0 - 99	50

<MANUAL: RSPF mode document scan position adjustment>

- 1) Enter the set value with 10-key.
- 2) Press [OK] key. (The set value is saved.)

Item/Display	Content	Setting range	Default value
A ADJUST VALUE	RSPF mode document scan position adjustment (Scanner stop position adjustment)	1 - 99	5

- When the adjustment value is increased, the scanner stop position in the RSPF mode is shifted to the right.
- When the adjustment value is changed by 1, the position is shifted by 0.1mm.

## 55

<b>55-1</b>	
<b>Purpose</b>	(Do not use this function unless specially required.)
<b>Function (Purpose)</b>	Used to set the specifications of the engine control operations. (SOFT SW)

#### Section

#### Operation/Procedure

<b>55-2</b>	
<b>Purpose</b>	(Do not use this function unless specially required.)
<b>Function (Purpose)</b>	Used to set the specifications of the scanner control operation. (SOFT SW)

#### Section

#### Operation/Procedure

<b>55-3</b>	
<b>Purpose</b>	(Do not use this function unless specially required.)
<b>Function (Purpose)</b>	Used to set the specifications of the controller operation. (SOFT SW)

#### Section

#### Operation/Procedure

<b>55-10</b>	
<b>Purpose</b>	Adjustment/Setting
<b>Function (Purpose)</b>	Used to set the special stamp text. (Taiwan only)

#### Section

#### Operation/Procedure

- 1) Select an item to be set (digit, color, type) with the scroll key.
- 2) Enter the value corresponding to the setting item with 10-key.
- 3) Press [OK] key.

Item/Display			Content		Setting range	Default value
A	1ST DIGIT		First digit (left edge)		1 - 90	1
B	2ND DIGIT		Second digit			
C	3RD DIGIT		Third digit		32 [blank: 20H]	
D	4TH DIGIT		Fourth digit		65 - 90 [Alphabet: 41H("A") - 5AH("Z")]	
E	5TH DIGIT		Fifth digit		48 - 57 [Numeral: 30H("0") - 39H("9")]	
F	6TH DIGIT		Sixth digit (right edge)			
G	COLOR	K	Color specification input		0	0
		C			1	
		M			2	
		Y			3	
		R			4	
		G			5	
		B			6	
H	TYPE	PATTERN 1	Print composing method	Edging type	0	1
		PATTERN 2		OR process type	1	
		PATTERN 3		No-delete-composition type	2	

#### Input value

Print	Blank	A	B	C	E	F	G
Input value	32	65	66	67	69	70	71

Print	H	I	J	K	L	M	N
Input value	72	73	74	75	76	77	78

Print	O	P	Q	R	T	U	V
Input value	79	80	81	82	84	85	86

Print	W	X	Y	Z	0	1	2
Input value	87	88	89	90	48	49	50

Print	3	5	6	7	8	9
Input value	51	53	54	55	56	57

## 56-1

<b>Purpose</b>	Backup
<b>Function (Purpose)</b>	Used to transport data between HDD - MFP PWB SRAM/EEPROM. (Used to repair the PWB.)

## Section

## Operation/Procedure

- 1) Select a target content of data transfer.
- 2) Press [EXECUTE] key and press [YES] key.  
Data transfer of the item selected in procedure 1) is executed.  
When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

EEPROM → HDD	Transfer from EEPROM to HDD
HDD → EEPROM	Transfer from HDD to EEPROM

## 56-2

<b>Purpose</b>	Data backup
<b>Function (Purpose)</b>	Used to backup the data in the EEPROM, SD Card, and HDD (including user authentication data and address data) to the USB memory. (Corresponding to the device cloning and the storage backup.)

## Section

## Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Select a target transfer item with the touch panel.  
<IMPORT>  
From USB MEMORY DEVICE To EEPROM, SD Card HDD  
<EXPORT>  
From EEPROM, SD Card, HDD To USB MEMORY
- 3) Press [EXECUTE] key, and press [YES] key.  
Data transfer selected in the procedure 2) is performed  
When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

(Machine with the DSK installed)

- 1) Insert the USB memory into the main unit.
- 2) Select a target transfer item with the touch panel.  
<IMPORT>  
From USB MEMORY DEVICE to EEPROM, SD Card HDD  
<EXPORT>  
From EEPROM, SD Card, HDD to USB MEMORY DEVICE
- 3) Enter the password with 10-key.
- 4) Press [SET] key.
- 5) Press [EXECUTE] key, and press [YES] key.  
Data transfer selected in the procedure 2) is performed.  
When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

<Data list outside the backup targets>

(EEPROM/SD Card)

PWB Type	Content	NOTE
Controller	Machine serial No.	
	Product key information	
	Various counter	Copy counter/FAX send counter etc.
	Trouble history	

PWB Type	Content	NOTE
PCU	Machine serial No.	
	Various counter	Maintenance counter
	Machine adjustment execute history	
	Trouble history	
SCU	Various counter	Maintenance counter
	Trouble history	

(HDD)

Classification	Content	NOTE
Japanese FEP	User dictionary	
Job end list	Job end list display data (The image send series include the preserved job list.)	
Log	Job log	Read from WEB is enable.
New N/A	<ul style="list-style-type: none"> <li>• Print history information</li> <li>• JAM history information</li> <li>• Trouble history information</li> <li>• Same position continuous jam count value</li> <li>• Charging information</li> <li>• Life information</li> </ul>	
Operation manual	E-manual	

## 56-3

<b>Purpose</b>	Data backup
<b>Function (Purpose)</b>	Used to backup the document filing data to the USB memory.

## Section

## Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Select a target transfer item with the touch panel.  
<IMPORT>  
From USB MEMORY DEVICE to EEPROM, SD Card, HDD  
<EXPORT>  
From EEPROM, SD Card, HDD to USB MEMORY DEVICE
- 3) Press [EXECUTE] key, and press [YES] key.  
Data transfer selected in the procedure 2) is performed.  
When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

## 56-4

<b>Purpose</b>	Data backup
<b>Function (Purpose)</b>	Used to backup the JOB log data to the USB memory.

## Section

## Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Press [JOB LOG EXPORT] key.
- 3) Press [EXECUTE] key, and press [YES] key.  
Data transfer selected in the procedure 2) is performed.  
When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

<b>56-5</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to import the SIM22-6 data to a USB memory in the TEXT format.

#### Section

#### Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Select a kind of data to be imported.
- 3) Press [EXECUTE] key, and press [YES] key.

Procedure 2) The selected data are imported.

When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

<b>56-11</b>	
<b>Purpose</b>	Data copy
<b>Function (Purpose)</b>	Used to copy the SD Card data to an option HDD.

#### Section

#### Operation/Procedure

- 1) Install an option HDD.
- 2) Press [EXECUTE] key, and press [YES] key.

The SD Card data are copied to the option HDD.

When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

#### Note

This simulation functions only for the 18cpm/20cpm model without HDD.

Result display	Description
COMPLETE	Normal completion
ERROR (HDD ACCESS ERROR)	HDD access disable
ERROR (LOW LEVEL BLOCK WRITE ERROR)	Write error
ERROR (LOW LEVEL BLOCK READ ERROR)	Read error
ERROR (NO DATA ADJUSTMENT)	Data discrepancy between the SD Card and the HDD
TROUBLE (U2-42)	U2-42 occurrence

<b>56-12</b>	
<b>Purpose</b>	Data copy
<b>Function (Purpose)</b>	Used to copy the SD Card data to an option HDD.

#### Section

#### Operation/Procedure

- 1) Install the accessory SD Card (4GB) to the option HDD kit.
  - 2) Press [EXECUTE] key, and press [YES] key.
- The data which were copied to the HDD with SIM56-11 are copied to the SD Card (4GB).
- When the operation is completed normally, "COMPLETE" is displayed. In case of an abnormal end, "ERROR" is displayed.

#### Note

This simulation functions only for the 18cpm/20cpm model with HDD installed.

Result display	Description
COMPLETE	Normal completion
NO DATA	There are no copy data of the SD Card in the HDD.
ERROR (EXPORT DATA ILLEGAL)	SD Card data error in the HDD
ERROR (LOW LEVEL BLOCK READ ERROR)	Read error
ERROR (NO DATA ADJUSTMENT)	Data discrepancy between the SD Card and the HDD
ERROR (SD ACCESS ERROR)	SD Card access error

## 60

<b>60-1</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the memory operations (read/write) of the MFP PWB.

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- Start the test.

Result display	Description
OK	Success
NG	Fail
NONE	Not installed (Including DIMM trouble)
INVALID	Execution disable

SLOT	Description	
ICU SLOT-1	ICU standard memory	DIMM1
ICU SLOT-2	ICU expansion memory	DIMM2
PCL SLOT-1	Printer standard memory	DIMM3
PCL SLOT-2	Printer expansion memory	DIMM4
ACRE SLOT	Enhanced compression kit memory	-

## 61

<b>61-1</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the LSU polygon motor rotation and laser detection.

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- When the operation is completed normally, [OK] is displayed. In case of an abnormal end, [NG] is displayed.

Display	Content
LSU TESTRESULT NG: PG	Polygon mirror rotation abnormality
LSU TESTRESULT NG: K	Laser abnormality (K)
LSU TESTRESULT NG: CL	Laser light emitting abnormality (C,M,Y)

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the laser power
<b>Section</b>	

**Operation/Procedure**

- 1) Select a target mode for adjustment with [COPY], [PR600/FAX] on the touch panel.
- 2) Select an adjustment target item with scroll key on the touch panel.
- 3) Enter the adjustment value using the 10-key.
- 4) Press [OK] key. (The set value is saved.)

When the laser power and the DUTY adjustment value are increased, the print density is increased and the line width of line images are increased.

**18cpm/20cpm machine**

Mode	Item/Display	Content	Setting range	Default value	Destination linkage
COPY	A LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	110	×
	B LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	110	×
	C LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	110	×
	D LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	110	×
	E LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	110	×
	F LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	110	×
	G LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	110	×
	H LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	110	×
	I LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	141	×
	J LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	141	×
	K LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	141	×
	L LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	141	×
	M LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	141	×
	N LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	141	×
	O LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	141	×
	P LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	141	×
	Q LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	110	×
	R LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	110	×
	S LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	141	×
	T LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	141	×
	U LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	○
	V LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	○
	W LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	○
	X LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	○
	Y LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	○
	Z LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	○
	AA LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	○
	AB LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	○
	AC LASER DUTY MIDDLE (BW)	Laser DUTY select middle speed (BW)	0 - 255	0	○
	AD LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	○
	AE LASER DUTY MIDDLE (K 1BIT)	Laser DUTY select middle speed (K)*1	0 - 255	0	○
	AF LASER DUTY MIDDLE (C 1BIT)	Laser DUTY select middle speed (C)*1	0 - 255	0	○
	AG LASER DUTY MIDDLE (M 1BIT)	Laser DUTY select middle speed (M)*1	0 - 255	0	○
	AH LASER DUTY MIDDLE (Y 1BIT)	Laser DUTY select middle speed (Y)*1	0 - 255	0	○
	AI LASER DUTY LOW (K 1BIT)	Laser DUTY select low speed (K)*1	0 - 255	0	○
	AJ LASER DUTY LOW (C 1BIT)	Laser DUTY select low speed (C)*1	0 - 255	0	○
	AK LASER DUTY LOW (M 1BIT)	Laser DUTY select low speed (M)*1	0 - 255	0	○
	AL LASER DUTY LOW (Y 1BIT)	Laser DUTY select low speed (Y)*1	0 - 255	0	○
	AM LASER DUTY MIDDLE (BW 1BIT)	Laser DUTY select middle speed (BW)*1	0 - 255	0	○
	AN LASER DUTY LOW (BW 1BIT)	Laser DUTY select low speed (BW)	0 - 255	0	○
PR600/FAX	A LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	110	×
	B LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	110	×
	C LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	110	×
	D LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	110	×
	E LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	110	×
	F LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	110	×
	G LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	110	×
	H LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	110	×
	I LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	141	×
	J LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	141	×
	K LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	141	×



Mode	Item/Display		Content	Setting range	Default value	Destination linkage
PR600/FAX	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	141	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	141	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	141	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	141	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	141	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	110	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	110	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	141	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	141	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	○
	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	○
	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	○
	AC	LASER DUTY MIDDLE (BW)	Laser DUTY select middle speed (BW)	0 - 255	0	○
	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	○
	AE	LASER DUTY MIDDLE (K 1BIT)	Laser DUTY select middle speed (K)	0 - 255	0	○
	AF	LASER DUTY MIDDLE (C 1BIT)	Laser DUTY select middle speed (C)	0 - 255	0	○
	AG	LASER DUTY MIDDLE (M 1BIT)	Laser DUTY select middle speed (M)	0 - 255	0	○
	AH	LASER DUTY MIDDLE (Y 1BIT)	Laser DUTY select middle speed (Y)	0 - 255	0	○
	AI	LASER DUTY LOW (K 1BIT)	Laser DUTY select low speed (K)	0 - 255	0	○
	AJ	LASER DUTY LOW (C 1BIT)	Laser DUTY select low speed (C)	0 - 255	0	○
	AK	LASER DUTY LOW (M 1BIT)	Laser DUTY select low speed (M)	0 - 255	0	○
	AL	LASER DUTY LOW (Y 1BIT)	Laser DUTY select low speed (Y)	0 - 255	0	○
	AM	LASER DUTY MIDDLE (BW 1BIT)	Laser DUTY select middle speed (BW)	0 - 255	0	○
	AN	LASER DUTY LOW (BW 1BIT)	Laser DUTY select low speed (BW)	0 - 255	0	○

#### 23cpm/31cpm(G) machine

Mode	Item/Display		Content	Setting range	Default value		Destination linkage
					23cpm machine	31cpm(G) machine	
COPY	A	LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	110	148	×
	B	LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	110	148	×
	C	LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	110	148	×
	D	LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	110	148	×
	E	LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	110	148	×
	F	LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	110	148	×
	G	LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	110	148	×
	H	LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	110	148	×
	I	LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	141	141	×
	J	LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	141	141	×
	K	LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	141	141	×
	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	141	141	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	141	141	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	141	141	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	141	141	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	141	141	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	110	148	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	110	148	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	141	141	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	141	141	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AC	LASER DUTY MIDDLE (BW)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	0	○

Mode	Item/Display		Content	Setting range	Default value		Destination linkage
					23cpm machine	31cpm(G) machine	
PR600/FAX	A	LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	110	148	×
	B	LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	110	148	×
	C	LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	110	148	×
	D	LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	110	148	×
	E	LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	110	148	×
	F	LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	110	148	×
	G	LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	110	148	×
	H	LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	110	148	×
	I	LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	141	141	×
	J	LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	141	141	×
	K	LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	141	141	×
	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	141	141	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	141	141	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	141	141	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	141	141	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	141	141	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	110	148	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	110	148	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	141	141	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	141	141	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AC	LASER DUTY MIDDLE (BW)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	0	○
	AE	LASER DUTY MIDDLE (K 1BIT)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	AF	LASER DUTY MIDDLE (C 1BIT)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	AG	LASER DUTY MIDDLE (M 1BIT)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	AH	LASER DUTY MIDDLE (Y 1BIT)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	AI	LASER DUTY LOW (K 1BIT)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	AJ	LASER DUTY LOW (C 1BIT)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AK	LASER DUTY LOW (M 1BIT)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AL	LASER DUTY LOW (Y 1BIT)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AM	LASER DUTY MIDDLE (BW 1BIT)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AN	LASER DUTY LOW (BW 1BIT)	Laser DUTY select low speed (BW)	0 - 255	0	0	○

#### 26cpm/36cpm/31cpm(A) machine

Mode	Item/Display		Content	Setting range	Default value		Destination linkage
					26cpm/31cpm(A) machine	36cpm machine	
COPY	A	LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	128	151	×
	B	LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	128	151	×
	C	LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	128	151	×
	D	LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	128	151	×
	E	LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	128	151	×
	F	LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	128	151	×
	G	LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	128	151	×
	H	LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	128	151	×
	I	LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	128	151	×
	J	LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	128	151	×
	K	LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	128	151	×
	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	128	151	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	128	151	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	128	151	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	128	151	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	128	151	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	128	151	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	128	151	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	128	151	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	128	151	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	0	○

Mode	Item/Display		Content	Setting range	Default value		Destination linkage
					26cpm/ 31cpm(A) machine	36cpm machine	
COPY	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AC	LASER DUTY MIDDLE(BW)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
PR600/FAX	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	0	○
	A	LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	128	151	×
	B	LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	128	151	×
	C	LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	128	151	×
	D	LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	128	151	×
	E	LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	128	151	×
	F	LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	128	151	×
	G	LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	128	151	×
	H	LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	128	151	×
	I	LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	128	151	×
	J	LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	128	151	×
	K	LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	128	151	×
	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	128	151	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	128	151	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	128	151	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	128	151	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	128	151	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	128	151	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	128	151	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	128	151	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	128	151	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AC	LASER DUTY MIDDLE (BW)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	0	○
	AE	LASER DUTY MIDDLE (K 1BIT)	Laser DUTY select middle speed (K)	0 - 255	0	0	○
	AF	LASER DUTY MIDDLE (C 1BIT)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	AG	LASER DUTY MIDDLE (M 1BIT)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	AH	LASER DUTY MIDDLE (Y 1BIT)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	AI	LASER DUTY LOW (K 1BIT)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	AJ	LASER DUTY LOW (C 1BIT)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AK	LASER DUTY LOW (M 1BIT)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AL	LASER DUTY LOW (Y 1BIT)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AM	LASER DUTY MIDDLE (BW 1BIT)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AN	LASER DUTY LOW (BW 1BIT)	Laser DUTY select low speed (BW)	0 - 255	0	0	○
PR1200	A	LASER POWER MIDDLE (K1)	Used to set the laser power (Middle speed/K1)	0 - 255	128	151	×
	B	LASER POWER MIDDLE (K2)	Used to set the laser power (Middle speed/K2)	0 - 255	128	151	×
	C	LASER POWER MIDDLE (C1)	Used to set the laser power (Middle speed/C1)	0 - 255	128	151	×
	D	LASER POWER MIDDLE (C2)	Used to set the laser power (Middle speed/C2)	0 - 255	128	151	×
	E	LASER POWER MIDDLE (M1)	Used to set the laser power (Middle speed/M1)	0 - 255	128	151	×
	F	LASER POWER MIDDLE (M2)	Used to set the laser power (Middle speed/M2)	0 - 255	128	151	×
	G	LASER POWER MIDDLE (Y1)	Used to set the laser power (Middle speed/Y1)	0 - 255	128	151	×
	H	LASER POWER MIDDLE (Y2)	Used to set the laser power (Middle speed/Y2)	0 - 255	128	151	×
	I	LASER POWER LOW (K1)	Used to set the laser power (Low speed/K1)	0 - 255	128	151	×
	J	LASER POWER LOW (K2)	Used to set the laser power (Low speed/K2)	0 - 255	128	151	×
	K	LASER POWER LOW (C1)	Used to set the laser power (Low speed/C1)	0 - 255	128	151	×
	L	LASER POWER LOW (C2)	Used to set the laser power (Low speed/C2)	0 - 255	128	151	×
	M	LASER POWER LOW (M1)	Used to set the laser power (Low speed/M1)	0 - 255	128	151	×
	N	LASER POWER LOW (M2)	Used to set the laser power (Low speed/M2)	0 - 255	128	151	×
	O	LASER POWER LOW (Y1)	Used to set the laser power (Low speed/Y1)	0 - 255	128	151	×
	P	LASER POWER LOW (Y2)	Used to set the laser power (Low speed/Y2)	0 - 255	128	151	×
	Q	LASER POWER MIDDLE (BW1)	Used to set the laser power (Middle speed/BW1)	0 - 255	128	151	×
	R	LASER POWER MIDDLE (BW2)	Used to set the laser power (Middle speed/BW2)	0 - 255	128	151	×
	S	LASER POWER LOW (BW1)	Used to set the laser power (Low speed/BW1)	0 - 255	128	151	×
	T	LASER POWER LOW (BW2)	Used to set the laser power (Low speed/BW2)	0 - 255	128	151	×
	U	LASER DUTY MIDDLE (K)	Laser DUTY select middle speed (K)	0 - 255	0	0	○

Mode	Item/Display		Content	Setting range	Default value		Destination linkage
					26cpm/31cpm(A) machine	36cpm machine	
PR1200	V	LASER DUTY MIDDLE (C)	Laser DUTY select middle speed (C)	0 - 255	0	0	○
	W	LASER DUTY MIDDLE (M)	Laser DUTY select middle speed (M)	0 - 255	0	0	○
	X	LASER DUTY MIDDLE (Y)	Laser DUTY select middle speed (Y)	0 - 255	0	0	○
	Y	LASER DUTY LOW (K)	Laser DUTY select low speed (K)	0 - 255	0	0	○
	Z	LASER DUTY LOW (C)	Laser DUTY select low speed (C)	0 - 255	0	0	○
	AA	LASER DUTY LOW (M)	Laser DUTY select low speed (M)	0 - 255	0	0	○
	AB	LASER DUTY LOW (Y)	Laser DUTY select low speed (Y)	0 - 255	0	0	○
	AC	LASER DUTY MIDDLE(BW)	Laser DUTY select middle speed (BW)	0 - 255	0	0	○
	AD	LASER DUTY LOW (BW)	Laser DUTY select low speed (BW)	0 - 255	0	0	○

<b>61-4</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to print the print image skew adjustment pattern. (LSU unit)
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select a target item with scroll key on the touch panel. 2) Enter the print conditions setting value with 10-key. 3) Press [EXECUTE] key. The print image skew adjustment pattern is printed.	

Item/Display		Content			Default value
A	MULTICOUNT	Print quantity (1-999)			1
B	PAPER	MFT	Tray selection	1	2 (Paper feed tray 1)
				2	
				3	
				4	
				5	
		LCC	6	LCC	

## 62

<b>62-1</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to format the hard disk/SD Card. (HDD: Excluding the Operation manual and the watermark data) (SD Card: User data)
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Press [EXECUTE] key. 2) Press [YES] key. Used to execute the HDD/SD Card format. When the operation is completed, [EXECUTE] key returns to the normal display.	

<b>62-2</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check read/write of the hard disk (partial).
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Press [EXECUTE] key. 2) Press [YES] key.	

<b>62-3</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check read/write of the hard disk (all areas).
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Press [EXECUTE] key. 2) Press [YES] key. Read/write operations are performed.	

<b>62-6</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to perform the self diagnostics of the hard disk.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Select the self diag area. 2) Press [EXECUTE] key. The self diag operation is performed.	

### Note

E7-03 error occurs. If there may be a trouble in the HDD, use this simulation to check the HDD.

SHORT S.T	Partial area diag
EXTENDED S.T	All area diag

When the operation is completed, [EXECUTE] key returns to the normal display.

Normal completion → "OK (RESULT:0)" is displayed.

Abnormal end → "NG (RESULT: Other than 0)" is displayed.

\* If the simulation cannot be executed or terminated abnormally for some reason, "ERROR" is displayed on the corresponding section.

<b>62-7</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to print the hard disk self diagnostics error log.
<b>Section</b>	
<b>Operation/Procedure</b>	
1) Press [EXECUTE] key. ERROR LOG SECTOR of the SMART function is executed, and the result is printed. When the operation is completed, [EXECUTE] key returns to the normal display.	

<b>62-8</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to format the hard disk/SD Card. (HDD: Excluding the Operation Manual, the watermark data, and the system area) (SD Card: User data)

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

Used to execute the hard disk format.

When the operation is completed, [EXECUTE] key returns to the normal display.

\* When the HDD formatting (except for the system area) is not completed normally, "HDD FORMAT (EXCEPT SYSTEM AREA) NG" is displayed.

<b>62-10</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the job completion list data.
<b>Section</b>	

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

Used to delete the job log data.

When the operation is completed, [EXECUTE] key returns to the normal display.

<b>62-11</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to delete the document filing data.
<b>Section</b>	

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

Used to delete the document filing data.

When the operation is completed, [EXECUTE] key returns to the normal display.

<b>62-12</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set Enable/Disable of auto format in a hard disk trouble.
<b>Section</b>	

#### Section

#### Operation/Procedure

- 1) Enter the set value with 10-key.
- 2) Press [OK] key.

The set value is saved.

When it is set to Enable, if a read error of HDD occurs in the system data storage area (FAX/device cloning data, etc.), only the system data storage area is cleared.

A	0	Enable
	1	Disable (Default)

<b>62-13</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to format the hard disk. (Operation Manual, watermark data only)

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

The operation manual data are deleted.

When the operation is completed, [EXECUTE] key returns to the normal display.

<b>62-14</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to delete the document filing management data.
<b>Section</b>	

#### Section

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.

The document filing management data are cleared.

At the same time, the job log data are also cleared.

This simulation is executed in the following trouble cases.

- \* The document filing function does not work normally.
- \* The job log is not recorded normally.

#### Note

This simulation may not function with some firmware versions.

In such a case, the firmware must be upgraded to the latest version.

<b>62-15</b>	
<b>Purpose</b>	Data conversion
<b>Function (Purpose)</b>	Used to convert the setting data for document filing reprint.
<b>Section</b>	

#### Section

#### Operation/Procedure

Press [EXECUTE] key.

Conversion of the setting data for document filing reprint is started. When the procedure is completed, "EXECUTE" button returns to the normal display.

#### Description:

The document filing data made in a machine of the 26cpm/31cpm/36 cpm machine with the ICU firmware version 00.28.A1 or before cannot be reprinted under the environment of the ICU firmware version 01.00.A1 or later.

To solve this problem, use this simulation to convert the document filing data made under the older firmware into those for the new firmware, enabling reprinting.

Be sure to execute this simulation when the ICU firmware version is upgraded from 00.28.A1 or before to 01.00.A1 or later.

<b>62-20</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to check the operation of the mirroring hard disk. (26cpm/36cpm/31cpm(A) machine)
<b>Section</b>	Mirroring hard disk

#### Operation/Procedure

Enter the simulation mode, and the operation status of the HDD is displayed.

The status display is renewed in every second.

Display	Content description
OK	Normal operation
NONE	Not connected
REBUILDING	Data rebuilding
ERROR	Error occurrence
TROUBLE	Trouble

## 63

<b>63-1</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the shading correction result.
<b>Section</b>	Scanner

#### Operation/Procedure

- 1) Select a target color to display with [R] [G] [B] on the touch panel.

#### [RSPF]

Item/Display	Content	NOTE
GAIN ODD	Gain adjustment value (odd number)	
GAIN EVEN	Gain adjustment value (Even number)	
OFFSET ODD	Offset value (odd number)	
OFFSET EVEN	Offset value (even number)	
SMP AVE ODD	Reference plate sampling average value (ODD)	
SMP AVE EVEN	Reference plate sampling average value (EVEN)	
TARGET VALUE	Target value	
BLACK LEVEL	Black output level	

Item/Display	Content	NOTE	
ERROR CODE	Error code (0, 1-14) (for debug)	0	No error
		1	Loop number over
		2	The target value is under the specified value.
		3	The gain set value is negative.
		4	END is not asserted. (Gain adjustment)
		5	(reserve)
		6	Underflow
		7	Black shading error
		8	Other error
		9	END is not asserted. (White shading)
		10	END is not asserted. (Black shading)
		11	END is not asserted. (Light quantity correction)
		12	END is not asserted. (Scan)
		13	Register check error. (When booting/ Before gain)
		14	Register check error. (Before light quantity correction)
RSPF WHITE LEVEL 1ST	First scan RSPF white reference level		
RSPF WHITE LEVEL 2ND	Second scan RSPF white reference level		

<b>63-2</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to perform shading.
<b>Section</b>	

#### Operation/Procedure

- 1) (When RSPF model)  
Press [EXECUTE] key.  
Used to perform shading.

When the operation is completed, [EXECUTE] key returns to the normal display.

<b>63-3</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to perform scanner (CCD) color balance and gamma auto adjustment.
<b>Section</b>	Scanner

#### Operation/Procedure

- 1) Place the SIT chart (UKOG-0280FCZZ or UKOG-0280FCZ1) on the reference position of the left rear frame side of the document table.
- 2) Press [EXECUTE] key.  
The scanner (CCD) color balance automatic adjustment is performed.

When the operation is completed, [EXECUTE] key returns to the normal display.

After completion of the operation, press [RESULT] key, and the adjustment data are displayed. At that time, the target color of data display can be selected with [R] [G] [B] key.

<b>63-4</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the SIT chart patch density.
<b>Section</b>	

#### Operation/Procedure

- Set the SIT chart (UKOG-0280FCZZ or UKOG-0280FCZ1) to the reference position on the left rear frame side of the document table.
- Press [EXECUTE] key.  
The patch of the SIT chart is scanned.  
When the operation is completed, [EXECUTE] key returns to the normal display.
- Select a data display mode.

THROUGH GAMMA	SIT chart scan data
COPY GAMMA	Copy mode gamma process data of the SIT chart scan data
SCANNER GAMMA	Image send mode gamma process data of the SIT chart scan data
SIT CHECK	SIT chart scan data/Check result

Select an target display color with [R] [G] [B] keys.

<b>63-5</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to perform the scanner (CCD) color balance and gamma default setting.
<b>Section</b>	

#### Operation/Procedure

- Press [EXECUTE] key, and press [YES] key
- The scanner (CCD) color balance and gamma are set to the default.

<b>63-6</b>	
<b>Purpose</b>	Adjustment/Setting/Operation data check
<b>Function (Purpose)</b>	Used to display the scan level and the density level of the copy color balance adjustment patch.
<b>Section</b>	

#### Operation/Procedure

- Set the color balance adjustment pattern sheet printed with SIM46-21 on the document table.
- Press [EXECUTE] key.  
The patch image of the adjustment pattern sheet is scanned.  
Select a target color with [C] [M] [Y] [K] key.

<b>63-7</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to register the service target of the copy mode auto color balance adjustment.
<b>Section</b>	

#### Operation/Procedure

- Press [SETUP] key on the touch panel.
- Set the color balance adjustment pattern sheet printed with SIM46-21 on the document table.
- Press [EXECUTE] key.  
The patch image of the adjustment pattern sheet is scanned.
- Press [OK] key.  
The service target of the copy mode automatic color balance adjustment is registered according to the patch image of the scanned adjustment pattern sheet.  
The registered color balance and the density are displayed.  
Select a target color with [C] [M] [Y] [K] key.

### Important

This simulation is executed only when the copy color balance is manually adjusted.

B	Point B target value
C	Point C target value
D	Point D target value
E	Point E target value
F	Point F target value
G	Point G target value
H	Point H target value
I	Point I target value
J	Point J target value
K	Point K target value
L	Point L target value
M	Point M target value
N	Point N target value
O	Point O target value
BASE	Background sampling value

<b>63-8</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the default of the service target of the copy mode auto color balance adjustment.
<b>Section</b>	

#### Operation/Procedure

- Press [EXECUTE] key.
- Press [YES] key.  
The service target of the copy mode automatic color balance adjustment is set to the default.  
The service color balance target and the color balance target for the user color balance adjustment are set to the same color balance as the factory color balance target.

<b>63-11</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the target color balance of the copy mode auto color balance adjustment.
<b>Section</b>	

#### Operation/Procedure

- Select the target color balance with the touch panel.

Item/Display		Content	Default value
Target color balance	DEF1	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to Magenta. When this target is selected, the color balance is converted into natural gray color balance by the color table in an actual copy mode and print is made.	DEF 1
	DEF2	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to natural gray color balance. When this target is selected, the color balance is slightly shifted to Cyan by the color table in an actual copy mode and print is made.	
	DEF3	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to Cyan. When this target is selected, the color balance is converted into the color balance with enhanced Cyan by the color table in an actual copy mode and print is made.	

64-1	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Test print. (Self print) (Color mode)
<b>Section</b>	

**Operation/Procedure**

- Set the print conditions.  
 Select an item to be print condition with scroll keys.  
 Set the print conditions with 10-key.  
 Select a target print color with [K] [C] [M] [Y] key.
- Press [EXECUTE] key.  
 The test print (self print) is performed.

Item/Display		Content		Setting range		Default value
A	PRINT PATTERN (1, 2, 9 - 11, 17 - 19, 21, 22, 29)	Specification of the print pattern (* For details, refer to the description below.)		1 - 58 (Printable only 1, 2, 9 - 11, 17 - 19, 21, 22, 29)		1
B	DOT1 (DOT1>=2 IF A: 2,11)	Setting of print dot number (M parameter) (Self print pattern: m by n)		1-255 (Pattern 2, 11: 2-255 except above: 1-255)		1
C	DOT2 (DOT2>=2 IF A: 2,11)	Setting of blank dot number (N parameter) (Self print pattern: m by n)		0-255 (Pattern2, 11: 2-255 except above: 0-255)		254
D	DENSITY (FIXED "255" IF A: 9)	Used to specify the print gradation.		1-255 (Pattern 9: 255 Fixed except above:1-255)		255
E	MULTI COUNT	Number of print		1 - 999		1
F	EXPOSURE (2 - 8 IF A: 17 - 19)	THROUGH	Exposure mode specification	1-8 (Pattern 17-19: 2-8 except above:1-8)	1	8 (STANDARD DITHER)
		CHAR/PIC	No process (through)		2	
		CHAR/PRPIC	Text/Printed Photo		3	
		CHAR	Text/ Photograph		4	
		PRINT PIC	Text		5	
		PRINT PAPER	Printed Photo		6	
		MAP	Photograph		7	
		STANDARD DITHER	Map		8	
G	PAPER	MFT	Tray selection	1 - 6	1	2 (CS1)
		CS1	Manual paper feed		2	
		CS2	Tray 1		3	
		CS3	Tray 2		4	
		CS4	Tray 3		5	
		LCC	Tray 4		6	
H	DUPLEX	YES	Duplex print selection	0 - 1	0	1 (NO)
		NO	No		1	
I	PAPER TYPE	PLAIN	Paper type	1 - 6	1	1 (PLAIN)
		HEAVY	Standard paper		2	
		OHP	Heavy paper		3	
		ENVELOPE	OHP		4	
		HEAVY2	Envelope		5	
		GLOSSY	Heavy paper 2		6	

**Print pattern of Item A**

Pattern No.	Content	Pattern generating section	NOTE
1	Grid pattern	LSU-ASIC	<ul style="list-style-type: none"> <li>When the print width is 100 or more and all colors are selected, print is made in the three colors (CMY).</li> <li>Print is started at 4mm from the paper lead edge.</li> <li>Writing regardless of pound. The first one is fixed to LD1.</li> </ul>
2	Dot print		-
9	Each color 10% area (A4/A4R) density print		<ul style="list-style-type: none"> <li>Each interval is 41.86mm (989dot).</li> <li>If m is not in the range of 1 - 13%, it is rounded.</li> <li>K print is started at 17mm from the paper lead edge.</li> </ul>
10	8-color belt print		
11	4-color dot print (sub scan)		<ul style="list-style-type: none"> <li>For every 1/4 of the sub scanning direction paper size, print is made for each color.</li> <li>When N=0, print of all the background is made in 4 colors.</li> </ul>
17	All background (halftone)	Halftone (IMG-ASIC rear process)	<ul style="list-style-type: none"> <li>When all colors are selected, print is made in CMY.</li> </ul>
18	256 gradations pattern (Other dither)		<ul style="list-style-type: none"> <li>When all colors are selected, print is made in CMY.</li> <li>16 gradations are printed in the main scanning direction, and feedback is made, and the next 16 gradations are printed. (16 x 16 patch print)</li> <li>Print is started at 5mm from the paper lead edge.</li> <li>Print is made from 255 gradations, and 0-254 gradations are printed.</li> </ul>
19	256 gradations pattern (For text dither)		<ul style="list-style-type: none"> <li>Print is made from 255 gradations, and 0-254 gradations are printed.</li> </ul>



Pattern No.	Content	Pattern generating section	NOTE
21	4-point dot print (main scan)	LSU-ASIC	<ul style="list-style-type: none"> <li>For every 1/4 of the main scanning direction paper size, print is made for each color.</li> <li>When N=0, print of all the background is made in 4 colors.</li> </ul>
22	Slant line	LSU-ASIC	
29 (26cpm/36cpm/ 31cpm(A) machine)	Dot print 1200dpi	LSU-ASIC	M = 1 (Fixed), N = 1 or 3

64-2	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Test print. (Self print) (Monochrome mode)
<b>Section</b>	

#### Operation/Procedure

- Set the print conditions.  
Select an item to be print condition with scroll keys.  
Set the print conditions with 10-key.
- Press [EXECUTE] key.  
The test print (self print) is performed.

Item/Display			Content		Setting range		Default value
A	PRINT PATTERN (1, 2, 9 - 11, 17 - 19, 21, 22, 29)		Print pattern specification (* For details, refer to the description below.)		1 - 58 (Printable only 1, 2, 9 - 11, 17 - 19, 21, 22, 29)		1
B	DOT1 (DOT1>=2 IF A: 2,11)		Setting of print dot number (M parameter) (Self print pattern: m by n)		1-255 (Pattern 2, 11: 2-255 except above: 1-255)		1
C	DOT2 (DOT2>=2 IF A: 2,11)		Setting of blank dot number (N parameter) (Self print pattern: m by n)		0-255 (Pattern2, 11: 2-255 except above: 0-255)		254
D	DENSITY (FIXED "255" IF A: 9)		Used to specify the print gradation.		1-255 (Pattern 9: 255 Fixed except above:1-255)		255
E	MULTI COUNT		Number of print		1 - 999		1
F	EXPOSURE (2 - 8 IF A: 17 - 19)	THROUGH	Exposure mode specification	No process (through)	1-8 (Pattern 17-19: 2-8 except above: 1-8)	1	8 (STANDARD DITHER)
		CHAR/PIC		Text/Printed Photo		2	
		CHAR/PRPIC		Text/ Photograph		3	
		CHAR		Text		4	
		PRINT PIC		Printed Photo		5	
		PRINT PAPER		Photograph		6	
		MAP		Map		7	
		STANDARD DITHER		Dither without correction		8	
G	PAPER	MFT	Tray selection	Manual paper feed	1 - 6	1	2 (CS1)
		CS1		Tray 1		2	
		CS2		Tray 2		3	
		CS3		Tray 3		4	
		CS4		Tray 4		5	
		LCC		LCC		6	
H	DUPLEX	YES	Duplex print selection	Yes	0 - 1	0	1 (NO)
		NO		No		1	
I	PAPER TYPE	PLAIN	Paper type	Standard paper	1 - 6	1	1 (PLAIN)
		HEAVY		Heavy paper		2	
		OHP		OHP		3	
		ENVELOPE		Envelope		4	
		HEAVY2		Heavy paper 2		5	
		GLOSSY		Glossy paper		6	

#### Print pattern of Item A

Pattern No.	Content	Pattern generating section	NOTE
1	Grid pattern	LSU-ASIC	<ul style="list-style-type: none"> <li>When the print width is 100 or more and all colors are selected, print is made in the three colors (CMY).</li> <li>Print is started at 4mm from the paper lead edge.</li> <li>Writing regardless of pound. The first one is fixed to LD1.</li> </ul>
2	Dot print		—
9	Each color 10% area (A4/ A4R) density print		<ul style="list-style-type: none"> <li>Each interval is 41.86mm (989dot).</li> <li>If m is not in the range of 1 - 13%, it is rounded.</li> <li>K print is started at 17mm from the paper lead edge.</li> </ul>
10	8-color belt print		
11	4-color dot print (sub scan)		<ul style="list-style-type: none"> <li>For every 1/4 of the sub scanning direction paper size, print is made for each color.</li> <li>When N=0, print of all the background is made in 4 colors.</li> </ul>

Pattern No.	Content	Pattern generating section	NOTE
17	All background (halftone)	Halftone (IMG-ASIC rear process)	—
18	256 gradations pattern (Other dither)		—
19	256 gradations pattern (For text dither)		—
21	4-point dot print (main scan)	LSU-ASIC	<ul style="list-style-type: none"> <li>For every 1/4 of the main scanning direction paper size, print is made for each color.</li> <li>When N=0, print of all the background is made in 4 colors.</li> </ul>
22	Slant line	LSU-ASIC	
29 (26cpm/36cpm/31cpm(A) machine)	Dot print 1200dpi	LSU-ASIC	M = 1 (Fixed), N = 1 or 3

<b>64-4</b>	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Printer test print. (Self print)
<b>Section</b>	

#### Operation/Procedure

- Set the print conditions.  
 Select an item to be print condition with scroll keys.  
 Set the print conditions with 10-key.  
 Select a target print color with [K] [C] [M] [Y] key.
- Press [EXECUTE] key.
- The test print (self print) is performed.

Item/Display		Content	Setting range	Default value
A	PRINT PATTERN	Specification of the print pattern (* For details, refer to the description below.)	1 - 6	6
B	DENSITY	Used to specify the print gradation.	1 - 255	128
C	MULTI COUNT	Number of print	1 - 999	1
D	PAPER	Paper feed tray selection	Manual paper feed	3 (CS2)
			Tray 1	
			Tray 2	
			Tray 3	
			Tray 4	
			LCC	
E	HALFTONE	Halftone	Low line number	0 (LOW)
			High line number	
			Glossy paper	
F	QUALITY	Image quality setting	Standard	1 (HIGHQUALITY)
			High quality	
			Fine (26cpm/36cpm/31cpm(A) machine)	
G	DITHER	Specification of dither correction	Straight	1 (CALIB)
			Calibration	
H	PAPER TYPE	Paper type	Standard paper	0
			Heavy paper	
			Heavy paper 2	
			Glossy paper	

#### Print pattern of Item A

Pattern No.	Content
1	256 gradations pattern (COLOR)
2	256 gradations pattern (B/W)
3	256 gradations pattern (COLOR) (Y-M-C-K continuous)
4	Halftone pattern (COLOR)
5	Halftone pattern (B/W)
6	Background dot print

<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Printer test print. (Self print) (PCL)
<b>Section</b>	

**Operation/Procedure**

- Set the print conditions.  
 Select an item to be print condition with scroll keys.  
 Set the print conditions with 10-key.  
 Select a target print color with [K] [C] [M] [Y] key.
- Press [EXECUTE] key.  
 The test print (self print) is performed.

Item/Display			Content		Setting range	Default value
A	PRINT PATTERN		Print pattern specification		1 - 5	3
B	DENSITY		Print gradation specification		1 - 255	255
C	MULTI COUNT		Number of print		1 - 999	1
D	PAPER	MFT	Paper feed tray selection	Manual paper feed	1	2 (CS1)
		CS1		Tray 1	2	
		CS2		Tray 2	3	
		CS3		Tray 3	4	
		CS4		Tray 4	5	
		LCC		LCC	6	
E	HALFTONE	LOW(IMAGE)	Halftone	For Photo	0	3 (AUTO)
		HIGH(TEXT)		For text	1	
		GLOSSY		For glossy paper	2	
		AUTO		Auto (for photo/text)	3	
F	QUALITY	STANDARD	Image quality setting	Standard (600dpi, 1bit)	0	1 (HIGHQUALITY)
		HIGHQUALITY		High quality (600dpi, 4bit)	1	
		FINE		Fine (1200dpi, 1bit) (26cpm/36cpm/31cpm(A) machine)	2	
G	DITHER	STRAIGHT	Specification of dither correction	0: Straight	0	1
		CALIB		1: Calibration	1	
H	PAPER TYPE	PLAIN	Paper type	Standard paper	0	0 (PLAIN)
		HEAVY		Heavy paper	1	
		HEAVY2		Heavy paper 2	2	
		GLOSSY		Glossy paper	3	
I	INTENT	PERCEPTUAL	Rendering indent	Perceptual	0	0 (PERCEPTUAL)
		COLORIMETRIC		Color metric	1	
		SATURATION		Saturation	2	
J	OUTPUT PROFILE	SHARP	Output profile	Standard	0	0 (SHARP)
		STANDARD		Photo image	1	
		GRAPHICS		Graphics	2	
K	RGB SOURCE PROFILE	SRGB	RGB source profile	SRGB	0	0 (SRGB)
		GAMMA1.6		Gamma 1.6	1	
		GAMMA1.8		Gamma 1.8	2	
		GAMMA2.0		Gamma 2.0	3	
		GAMMA2.6		Gamma 2.6	4	
		GAMMA3.0		Gamma 3.0	5	
L	GRAY COMPENSATION	TONER SAVE		For TONER SAVE	6	
		K	Gray print method	Print method K	0	0 (K)
M	PURE BLACK PRINT	KCMY		KCMY	1	
		ON	Black monochrome print	set.	0	0 (ON)
N	TONER SAVE MODE	OFF		not set.	1	
		ON	Monochrome toner save	not set.	0	0 (OFF)
		OFF		set.	1	

**Print pattern of Item A**

Pattern No.	Content
1	COLOR
2	B/W
3	Continuous COLOR,B/W
4	Service chart (COLOR)
5	Service chart (B/W)

64-6	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Printer test print. (Self print) (PS)
<b>Section</b>	

#### Operation/Procedure

- Set the print conditions.  
 Select an item to be print condition with scroll keys.  
 Set the print conditions with 10-key.  
 Select a print color with [K] [C] [M] [Y] key.
- Press [EXECUTE] key.  
 The test print (self print) is performed.

Item/Display			Content		Setting range	Default value
A	PRINT PATTERN		Print pattern specification		1 - 2	1
B	DENSITY		Print gradation specification		1 - 255	255
C	MULTI COUNT		Number of print		1 - 999	1
D	PAPER	MFT	Paper feed tray selection	Manual paper feed	1	2 (CS1)
		CS1		Tray 1	2	
		CS2		Tray 2	3	
		CS3		Tray 3	4	
		CS4		Tray 4	5	
		LCC		LCC	6	
E	HALFTONE	LOW(IMAGE)	Halftone	For Photo	0	3 (AUTO)
		HIGH(TEXT)		For text	1	
		GLOSSY		For glossy paper	2	
		AUTO		Auto (for photo/text)	3	
F	QUALITY	STANDARD	Image quality setting	Standard (600dpi, 1bit)	0	1 (HIGHQUALITY)
		HIGHQUALITY		High quality (600dpi, 4bit)	1	
		FINE		Fine (1200dpi, 1bit) (26cpm/36cpm/31cpm(A) machine)	2	
G	DITHER	STRAIGHT	Specification of dither correction	0: Straight	0	1 (CALIB)
		CALIB		1: Calibration	1	
H	PAPER TYPE	PLAIN	Paper type	Standard paper	0	0 (PLAIN)
		HEAVY		Heavy paper	1	
		HEAVY2		Heavy paper 2	2	
		GLOSSY		Glossy paper	3	
I	INTENT	PERCEPTUAL	Rendering indent	Perceptual	0	0 (PERCEPTUAL)
		COLORIMETRIC		Color metric	1	
		SATURATION		Saturation	2	
J	OUTPUT PROFILE	SHARP	Output profile	Standard	0	0 (SHARP)
		STANDARD		Photo image	1	
		GRAPHICS		Graphics	2	
K	RGB SOURCE PROFILE	SRGB	RGB source profile	SRGB	0	0 (SRGB)
		GAMMA1.6		Gamma 1.6	1	
		GAMMA1.8		Gamma 1.8	2	
		GAMMA2.0		Gamma 2.0	3	
		GAMMA2.6		Gamma 2.6	4	
		GAMMA3.0		Gamma 3.0	5	
		TONER SAVE		For TONER SAVE	6	
L	GRAY COMPENSATION	K	Gray print method	Print method K only	0	0 (K)
		KCMY		KCMY	1	
M	PURE BLACK PRINT	ON	Black monochrome print	set.	0	0 (ON)
		OFF		not set.	1	
N	TONER SAVE MODE	OFF	Monochrome toner save	not set.	0	0 (OFF)
		ON		set.	1	
O	CMY SIMULATION	OFF	CMYK simulation	OFF	0	0 (OFF)
		SWOP		SWOP	1	
		EURO		EURO	2	
		JAPAN COLOR		JAPAN COLOR	3	
		TONER SAVE		For TONER SAVE	4	

#### Print pattern of Item A

Pattern No.	Content
1	COLOR
2	B/W

64-7	
<b>Purpose</b>	Operation test/check
<b>Function (Purpose)</b>	Used to print the adjustment pattern of the test print. (Self print). (The adjustment pattern of SIM46-21 is printed.)

#### Section

#### Operation/Procedure

- Set the print conditions.  
Select an item to be print condition with scroll keys.  
Set the print conditions with 10-key.
- Press [EXECUTE] key.  
The adjustment pattern of SIM46-21 is printed.

Item/Display			Content		Setting range	Default value	Writing
A	COPIES		Number of print		1 - 999	1	No
B	PROC ADJ	YES	0	The halftone process control correction value is reflected.	0 - 1	1	Yes
		NO	1	The halftone process control correction value is not reflected.			

## 65

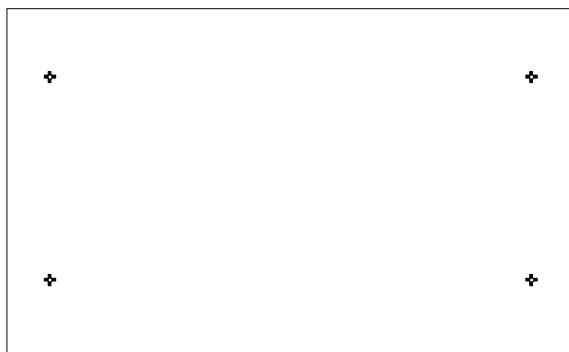
65-1	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to adjust the touch panel (LCD display section) detection coordinates.
<b>Section</b>	Operation panel section

#### Operation/Procedure

Touch the center of the cross mark at the four corners of the screen.

When the adjustment is completed normally, the screen shifts to the simulation sub number entry menu.

In case of an error, the screen returns to the adjustment menu.



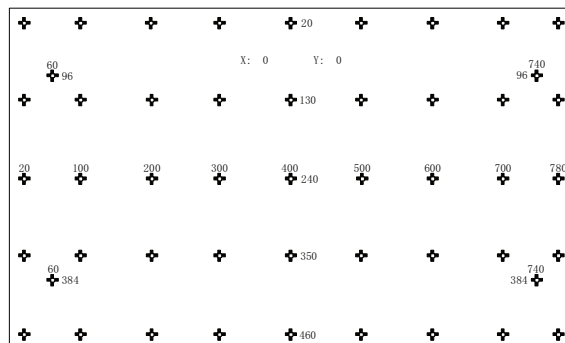
65-2	
<b>Purpose</b>	Operation check/test
<b>Function (Purpose)</b>	Used to display the touch panel (LCD display section) detection coordinates.

#### Section

#### Operation/Procedure

Touch the touch panel.

The coordinates X (horizontal direction) and Y (vertical direction) of the touched position is displayed in real time.



65-5	
<b>Purpose</b>	Operation check/test
<b>Function (Purpose)</b>	Used to check the operation panel key input.

#### Section

#### Operation/Procedure

Press the keys sequentially according to the guidance displayed on the screen.

If the key entry is effective, the guidance for pressing the next key is displayed. When all the key entries are completed, "COMPLETE" is displayed.

#### <Check target key>

7 Inch LCD model
JOB STATUS
SYSTEM SETTINGS
HOME
1
2
3
4
5
6
7
8
9
AUDIT CLEAR
0
PROGRAM
CLEAR
STOP
CLEAR ALL/RESET
START (COLOR)
START (MONO)

10 Inch LCD model
HOME

## 66-1

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to display the FAX-related soft SW (2 - 150) on the LCD to allow changing the soft SW while checking with the LCD.

<b>Section</b>	FAX
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**Operation/Procedure**

- Enter the [SW NO] with 10-key.
  - \* When [C] key is pressed, the entered value of [SW NO] is cleared.
- Press [DATA] button.  
The soft SW data entered in procedure 1) is displayed.
  - \* When [SW NO] button is pressed, the display returns to the initial screen.
- Enter the number corresponding to the bit to be changed with 10-key.
  - \* [1] → [0]
  - [0] → [1]
- When [EXECUTE] button is pressed, it is highlighted and the setting is saved.  
After saving the setting, [EXECUTE] button returns to the normal display.

## 66-2

<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to enter a country code and set the default value for the country code.

<b>Section</b>	FAX
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**Operation/Procedure**

- When the machine enters Simulation 66-02, the following screen is displayed.
  - \* When [DEST CODE] button is pressed, the display is shifted to the country code list screen.
  - \* The currently set country code is displayed in the column of "PRESENT:".
- Enter the country code (8 digits) with 10-key([0]/[1]). The entered country code is displayed in the column of "NEW:" and [SET] key becomes active.
  - \* When [C] key is pressed, the column of "NEW:" is cleared.
- When [SET] button is pressed after entering the country code, [EXECUTE] button becomes active. The country code is displayed in the column of "PRESENT:", and the column of "NEW:" is cleared.
- When [EXECUTE] button is pressed, it is highlighted and [YES] and [NO] buttons become active. The country name is displayed on the tile line.
- When [YES] button is pressed, it is highlighted and the soft SW corresponding to the country code is initialized.
- After completion of initialization of the soft SW, [EXECUTE], [YES], and [NO] buttons become inactive.

**Operation/Procedure (Shifting to the country page)**

- \* When [DEST CODE] button is pressed on the initial screen, the display is shifted to the country code list screen.  
Use scroll keys to select the country select page.

## &lt;Country code list&gt;

JAPAN	00000000
U.S.A.	10110101
AUSTRALIA	00001001
U.K.	10110100
FRANCE	00111101
GERMANY	00000100
SWEDEN	10100101
NEWZEALAND	01111110
CHINA	00100110
SINGAPORE	10011100
TW	11111110
MIDDLEANDNEAREAST	11111101
SLOVAKIA	11111100
OTHER3	11110111
FINLAND	00111100
NORWAY	10000010
DENMARK	00110001
NETHERLANDS	01111011
ITALY	01011001
SWITZERLAND	10100110
AUSTRIA	00001010
INDONESIA	01010100
THAILAND	10101001
MALAYSIA	01101100
INDIA	01010011
PHILIPPINES	10001001
HONGKONG	01010000
RUSSIA	10111000
SOUTHAFRICA	10011111
SPAIN	10100000
PORTUGUESE	10001011
LUXEMBURG	01101001
BELGIUM	00001111
CZECH	00101110
HUNGARY	01010001
GREECE	01000110
POLAND	10001010
BRAZIL	00010110

## 66-3

<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to check read/write of the EEPROM and the SDRAM on the MODEM controller and display the result.
<b>Section</b>	FAX

**Operation/Procedure**

- When the machine enters Simulation 66-03, the following screen is displayed.
  - \* Select the page of memory check item with the scroll key.
- When the memory check item button is selected, the display is shifted to the memory check screen.
- When [EXECUTE] button is pressed, it is highlighted and the memory check of the selected item is started.
- After completion of memory check, [EXECUTE] button returns to the normal display and the result of memory check is displayed.

**Memory check status**

NO CHECK	No check	
CHECKING	During checking	
OK	Check complete OK	
NG A##	Check complete NG	Error occurring address or data line is displayed for each item.

## Check item

Check memory item		Remark
1	All Memory Device Check (once)	All the items are checked once.
2	MFP SRAM (once) *1	Check only once
3	MFP SRAM (repeat) *1	Repeat check
4	MFP FLASH + OP.FLASH (once) *1	Check only once
5	MFP FLASH + OP.FLASH (repeat) *1	Repeat check
6	MODEM EEPROM <1> (once)	Check only once in LINE1
7	MODEM EEPROM <1> (repeat)	Repeat check in LINE1
8	MODEM SDRAM <1> (once)	Check only once in LINE1
9	MODEM SDRAM<1>(repeat)	Repeat check in LINE1

The number in < > indicates the line.

\*1: This function does not operated in the 26cpm/36cpm/31cpm(A) machines.

<b>66-4</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected signals to the line and the main unit speaker. (Send level: max.)
<b>Section</b>	FAX

### Operation/Procedure

- When the machine enters Simulation 66-04, the screen on the right is displayed. (Default, left upper selected.)  
\* Use scroll keys to switch the send mode select page.
- When a button of a signal to be sent is selected, it is highlighted and the previously set button is shifted to the normal display.
- When [EXECUTE] button is pressed, it is highlighted and signals are sent.
- To end signal send:  
When [EXECUTE] button is pressed, it is highlighted and signal send is interrupted.

### <Signal send table>

NOSIGNAL	33.6 V34	31.2 V34	28.8 V34
26.4 V34	24.0 V34	21.6 V34	19.2 V34
16.8 V34	14.4 V34	12.0 V34	9.6 V34
7.2 V34	4.8 V34	2.4 V34	14.4 V33
12.0 V33	14.4 V17	12.0 V17	9.6 V17
7.2 V17	9.6 V29	7.2 V29	4.8 V27t
2.4 V27t	0.3 FLG	CED 2100	CNG 1100
0.3 V21	ANSam	RINGER	No RBT

DP MAKE	DP BRK	NO MSG
---------	--------	--------

<b>66-5</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected signal to the line and the main unit speaker. (Send level: Soft SW setting) (For the kinds of send signals, refer to SIM66-04.)
<b>Section</b>	FAX

### Operation/Procedure

- When the machine enters Simulation 66-05, the following screen is displayed.  
\* Use scroll keys to switch the send mode select page.
- When a button of a signal to be sent is selected, it is highlighted and the previously set button is shifted to the normal display.
- When [EXECUTE] button is pressed, it is highlighted and signals are sent.
- To end signal send:  
\* When [EXECUTE] button is pressed, it is highlighted and signal send is interrupted.

<b>66-6</b>	
<b>Purpose</b>	Data output/Check
<b>Function (Purpose)</b>	Used to print the confidential registration check table (BOX NO., BOX name, pass-code. (If there is no confidential registration, no print is made.)
<b>Section</b>	FAX

### Operation/Procedure

- When [EXECUTE] button is pressed, it is highlighted and the confidential checkable is printed.  
\* If there is no confidential registration, no print is made even though [EXECUTE] key is pressed.
- After completion of printing, [EXECUTE] button returns to the normal display.

<b>66-7</b>	
<b>Purpose</b>	Data output/Check
<b>Function (Purpose)</b>	Used to output all image data saved in the image memory. (Confidential data are also outputted.)
<b>Section</b>	FAX

### Operation/Procedure

- When [EXECUTE] button is pressed, it is highlighted and all image data saved in the image memory are outputted.
- After completion of printing, [EXECUTE] button returns to the normal display.

<b>66-8</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected sound messages to the line and the speaker. (Send level: Max.)
<b>Section</b>	FAX

### Operation/Procedure

- When the machine enters Simulation 66-08, the following screen is displayed.
- When the sound message button to be sent is selected, it is highlighted and the previously set button returns to the normal display.

### <Sound message table>

NONE (Mute)	PAUSE (Pause melody)	MESSAGE1 (Message 1)	MESSAGE2 (Message 2)
MESSAGE3 (Message 3)	MESSAGE4 (Message 4)	MESSAGE5 (Message 5)	MESSAGE6 (Message 6)
ALARM (Alarm)	RINGER (Ringing sound (Speaker))	EXT.TEL.RINGER (External telephone call)	

<b>66-9</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected sound message to the line and the speaker. (Send level: Soft SW setting) * For details of sound messages, refer to the sound message table of SIM66-08.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-09, the following screen is displayed.
- 2) When a button of a sound message to be sent is selected, it is highlighted and the previously set button returns to the normal display.
- 3) When [EXECUTE] button is pressed, it is highlighted and a sound message is sent.
- 4) To end signal send:  
When [EXECUTE] button is pressed, it is highlighted and signal send is interrupted.

<b>66-10</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the FAX and image send image data. (The confidential data are also cleared.)
<b>Section</b>	FAX

#### Operation/Procedure

- 1) Press [EXECUTE] button.
- 2) Press [YES] button.
- 3) After completion of clearing, press [CA] key to reboot the machine.

<b>66-11</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected signal at 300bps to the line and the speaker. (Send level: Max.)
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-11, the following screen is displayed.
- 2) When a button of a sound message to be sent is selected, it is highlighted and the previously set button returns to the normal display.
- 3) When [EXECUTE] button is pressed, it is highlighted and a sound message is sent.
- 4) To end signal send:  
When [EXECUTE] button is pressed, it is highlighted and signal send is interrupted.

#### <300bps send signal table>

NO SIGNAL	11111	11110	00000
010101	00001		

<b>66-12</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the selected signal at 300bps to the line and the speaker. (Send level: Soft SW setting) * For the kings of send signals at 300bps, refer to SIM66-11, 300bps send signal table.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-12, the following screen is displayed.
- 2) When a button of a sound message to be sent is selected, it is highlighted and the previously set button returns to the normal display.
- 3) When [EXECUTE] button is pressed, it is highlighted and a sound message is sent.
- 4) To end signal send:  
When [EXECUTE] button is pressed, it is highlighted and signal send is interrupted.

<b>66-13</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to register dial numbers for SIM66-14/15/16, Dial test. (Up to 20 digits can be registered.)
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-13, the following screen is displayed.  
\* The number saved in the memory is displayed in the column of [PRESENT:]. (If there is no data, [-----] is displayed.)
- 2) Enter a number with 10-key.  
The entered number is displayed in the column of [NEW:].  
After entering 20 digits, 10-key is disabled (no response). Only [C] key is enabled. (10-key [0] to [9], [\*], [#], [C] key (back by one digit))
- 3) When [SET] key is pressed after completion of entry, the entered number is displayed (registered) in the column of [PRESENT:]. The column of [NEW:] becomes blank.

<b>66-14</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to execute the dial pulse (10PPS) send test and to adjust the make time.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-14, the following screen is displayed.
- 2) When [EXECUTE] button is pressed, it is highlighted and the dial pulse is sent from the line in the set make time.
- 3) To end the dial test, press [EXECUTE] button again. The button returns to the normal display and the test is terminated.



<b>66-15</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to execute the dial pulse (20PPS) send test and to adjust the make time.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-15, the following screen is displayed.
- 2) When [EXECUTE] button is pressed, it is highlighted and the dial pulse is sent from the line in the set make time.  
\* The dial pulse in this example is up to 20 digits registered with SIM66-13.
- 3) To end the dial test, press [EXECUTE] button again. The button returns to the normal display and the test is terminated.

<b>66-16</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Used to execute the DTFM signal send test and to adjust the send level.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-16, the following screen is displayed.
- 2) When [EXECUTE] button is pressed, it is highlighted and the dial pulse signal is sent from the line by the setting of high/low group of the signal send level.
- 3) To terminate the dial test, press [EXECUTE] button. The button returns to the normal display and the test is terminated.

<b>66-17</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the DTMF signal to the line and the speaker. (Send level: Max.)
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-17, the following screen is displayed.
- 2) When a button of a send signal is selected, it is highlighted and the previously set button returns to the normal display.
- 3) When [EXECUTE] button is pressed, it is highlighted and signals are sent.
- 4) To stop signal sending:  
When [EXECUTE] button is pressed, it returns to the normal display and signal sending is interrupted.

<b>66-18</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to send the DTMF signal to the line and the speaker. (Send level: Soft SW setting)
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-18, the following screen is displayed.
- 2) When a button of a send signal is selected, it is highlighted and the previously set button returns to the normal display.
- 3) When [EXECUTE] button is pressed, it is highlighted and signals are sent.
- 4) To stop signal sending:  
When [EXECUTE] button is pressed, it returns to the normal display and signal sending is interrupted.

<b>66-21</b>	
<b>Purpose</b>	Check
<b>Function (Purpose)</b>	Used to print the selected items (system error, protocol monitor).
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When an item button to be printed is selected, it is highlighted and the previously set button returns to the normal display.
- 2) Press [EXECUTE] button.  
[EXECUTE] button is highlighted and printing is started.
- 3) After completion of printing, [EXECUTE] button returns to the normal display.

#### <FAX information print content table>

PROTOCOL LINE 1	SYSTEM ERROR LINE 1
-----------------	---------------------

<b>66-22</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set the handset sound volume. (This simulation can be executed even though the handset setting is set to NO. When, however, the handset is not installed, the sound volume cannot be checked.) (Japan model only)

<b>Section</b>	FAX
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#### Operation/Procedure

- 1) When the machine enters the simulation, the number of the set sound volume is displayed. (In this example, MIDDLE is set as the default sound volume.)
- 2) Use 10-key to set the handset sound volume. (0: MIN 1:MIDDLE 2:MAX)
- 3) Press [EXECUTE] button to deliver the selected on-hold tone.  
\* If, however, the handset is not installed, the sound volume cannot be checked. Execution is possible.
- 4) When [EXECUTE] button is pressed, it is highlighted and delivery of the on-hold tone is stopped.

<b>66-24</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the FAST save data.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) Press [EXECUTE] button.
- 2) Press [YES] button.  
The FAST save data are cleared.
- 3) After completion of memory clear, [EXECUTE] button returns to the normal display and [YES] and [NO] buttons gray out.

<b>66-29</b>	
<b>Purpose</b>	Clear
<b>Function (Purpose)</b>	Used to initialize the telephone book data (the one-touch registration table, the FTP/Desktop expansion table, the group expansion table, the program registration table, the interface memory box table, the meta data, InboundRouting, and the DocumentAdmin table).

**Section** FAX

#### Operation/Procedure

- 1) Press [EXECUTE] button.
- 2) Press [YES] button.  
The telephone book data area cleared.
- 3) After completion of memory clear, [EXECUTE] button returns to the normal display and [YES] and [NO] buttons gray out.

<b>66-30</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to display the TEL/LIU status change. The display is highlighted by status change.

**Section** FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-30, the following screen is displayed.
- 2) HS1, HS2, RHS, and EXHS are highlighted when the signal is detected, and displayed normally when the signal is not detected.

#### <TEL/LIU status change item description>

HS1	Polarity inversion signal
HS2	Polarity inversion signal
RHS	Handset hook SW
EXHS	External telephone hook SW

<b>66-31</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to set ON/OFF the port for output to TEL/LIU.

**Section** FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-31, the following screen is displayed.
- 2) Change the port setting.  
When a port is set to ON, the port display is highlighted.
- 3) When [EXECUTE] button is pressed, the changed setting is reflected to the port which outputs to TEL/LIU.
- 4) To terminate the process, press [EXECUTE] button again.  
[EXECUTE] button returns to the normal display.

#### <Port which outputs to TEL/LIU>

CION	MR	EC	S.
------	----	----	----

<b>66-32</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to check the fixed data received from the line and to display the result.

**Section** FAX

#### Operation/Procedure

- 1) Press [EXECUTE] button to check the fixed data received from the line. At that time, [EXECUTE] button is highlighted.
  - \* Fixed data check procedure
    - The data received from the line is checked of the following fixed data status for minutes, then if they are in accord with "OK" is displayed on LCD, if not "NG" is displayed.
    - The judgment is made in 2 minutes.  
Receive speed: 300BPS  
Receive data: 00H  
Judgment data: 100byte
- 2) After completion of check, [EXECUTE] button returns to the normal display. The result is displayed as "OK" or "NG."

<b>66-33</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to execute detection of various signals with the line connected and to display the detection result. When a signal is detected, the display is highlighted.

**Section** FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-33, the following screen is displayed.
- 2) The signal to be checked can be selected from the two options: "FNET" and "BT/CNG/CED/DTMF."
- 3) When a signal is detected, "FNET" and "BUSY TONE CNG CED DTMF" are highlighted. When a signal is not detected, they are normally displayed.

#### <Signal used for signal detection check>

(When "FNET" is selected)

FNET
------

(When "BT/CNG/CED/DTMF" is selected)

BUSY TONE	CNG	CED	DTMF
-----------	-----	-----	------

<b>66-34</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to execute the send test and display the time required for sending image data in the test. Used to execute send test and display. (Unit: ms)

**Section** FAX

#### Operation/Procedure

- 1) FAX send is performed.
- 2) Enter the SIM 66-34 mode.  
The send time in procedure 1) is displayed.

<b>66-36</b>	
<b>Purpose</b>	Operation test/Check
<b>Function (Purpose)</b>	Used to check send and receive data from the MODEM controller to the MFP controller or the data line or the command line individually.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-36, the following screen is displayed.
- 2) Operation check  
Select an item to be checked on the screen.

#### <MFP controller I/F check item table>

MFP ← MDMC (DATA once) Data line Once	MFP → MDMC (DATA once) Data line Once
MFP ← MDMC (DATA repeat) Data line Repeat	MFP → MDMC (DATA repeat) Data line Repeat
MFP ← MDMC (CMD once) Command line Once	MFP → MDMC (CMD once) Command line Once
MFP ← MDMC (CMD repeat) Command line Repeat	MFP → MDMC (CMD repeat) Command line Repeat

<b>66-39</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to check and change the destination setting saved in EEPROM of the FAX BOX.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters the simulation, the currently set destination button is highlighted. (In the default state, JAPAN is set as the destination.)
- 2) Select a destination button to set the destination. (In this example, USA/CANADA is selected.) The selected button is highlighted and the previously selected button returns to the normal display.  
\* When the destination button is changed, the new destination setting is saved to EEPROM of the FAX BOX.

#### <Destination setting table>

JAPAN	U.S.A/CANADA	EUROPE	AUSTRALIA
CHINA	ASIA&OTHERS		

<b>66-42</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to rewrite the program to power control installed in the FAX BOX.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) Press [EXECUTE] button.[EXECUTE] button is highlighted and YES] and [NO] buttons become active.
- 2) Press [YES] button.  
The power control program is rewritten.
- 3) When rewriting of the power control program is normally completed, "OK" is displayed and [EXECUTE] button returns to the normal display, and [YES] and [NO] buttons gray out.

<b>66-43</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to write the adjustment value into the power control installed in the FAX BOX.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) When the machine enters Simulation 66-43, the following screen is displayed.  
\* Use scroll keys to select the select item of the power control adjustment value.
- 2) When [EXECUTE] key is pressed, it is highlighted and writing to the power control is executed. When writing is normally completed, "OK" is displayed. When it is failed, "NG" is displayed.
- 3) After completion of writing, [EXECUTE] key returns to the normal display.

#### <Set range and default value of each set value>

	Item	Set range	Default value
A	CI_LEVEL_JUDGE	2 to 15	6
B	CI_CYCLE_MIN	1 to 254	10
C	CI_CYCLE_MAX	2 to 255	142
D	CI_COUNT	2 to 15	3
E	RES_3.3V_LEVEL_JUDGE	2 to 15	15
F	EXHS_LEVEL_JUDGE	2 to 225	240
G	RHS_LEVEL_JUDGE	2 to 15	2
H	SON_TIMEOUT	1 to 127	20

<b>66-61</b>	
<b>Purpose</b>	Setting
<b>Function (Purpose)</b>	Used to display the FAX-related soft SW (151 - 250) on the LCD to allow changing the soft SW while checking with the LCD.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) Enter the [SW NO] with 10-key.
- 2) Press [DATA] button.  
The soft SW data entered in procedure 1) is displayed.
- 3) Enter the number corresponding to the bit to be changed with 10-key.  
\* [1] → [0]  
[0] → [1]
- 4) When [EXECUTE] button is pressed, it is highlighted and the setting is saved.

<b>66-62</b>	
<b>Purpose</b>	Backup
<b>Function (Purpose)</b>	Used to import the FAX receive data into a USB memory in PDF file type.
<b>Section</b>	FAX

#### Operation/Procedure

- 1) Insert the USB memory into the main unit.
- 2) Select data to be imported.
- 3) Press [EXECUTE] key.  
Execute import of data selected in procedure 2).  
When the operation is completed normally, [COMPLETE] is displayed. In case of an abnormal end, [ERROR] is displayed.

Error display	Content
ERROR: NO USB MEMORY DEVICE	No USB memory installed
ERROR: NO IMAGE DATA	No image data
ERROR	Other errors

## 67-17

<b>Purpose</b>	Reset
<b>Function (Purpose)</b>	Printer reset
<b>Section</b>	Printer

**Operation/Procedure**

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.  
The set data related to the printer are initialized. (Including the NIC setting.)

When the operation is completed, [EXECUTE] key returns to the normal display.

## 67-24

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Printer color balance adjustment (Auto adjustment)
<b>Section</b>	Printer

**Operation/Procedure**

- 1) Press [EXECUTE] key.  
The color patch image (adjustment pattern) is printed out.
- 2) Plate the printed adjustment pattern on the document table, select [FACTORY] or [SERVICE] mode.
- 3) Press [EXECUTE] key.  
The printer color balance auto adjustment is performed, and the adjustment result is printed.
- 4) Press [OK] key.  
The halftone correction target registration is processed.

## 67-25

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Printer color balance adjustment (Manual adjustment)
<b>Section</b>	Printer

**Operation/Procedure**

- 1) Select an adjustment target color with [K][C][M][Y] keys on the touch panel.
- 2) Select a target adjustment density level with scroll key on the touch panel.
- 3) Enter the set value with 10-key.  
\* When the  $\triangle$   $\nabla$  key is pressed, the setting value of each item can be changed with 1up (1down) collectively.
- 4) Press [OK] key. (The set value is saved.)

When the adjustment value is increased, the image density is increased, and vice versa.

When [EXECUTE] key is pressed, the check pattern is printed in the color balance and density corresponding to the adjustment value.

	Item/Display	Setting range	Default value
A	POINT1	1 - 999	500
B	POINT2	1 - 999	500
C	POINT3	1 - 999	500
D	POINT4	1 - 999	500
E	POINT5	1 - 999	500
F	POINT6	1 - 999	500
G	POINT7	1 - 999	500
H	POINT8	1 - 999	500
I	POINT9	1 - 999	500
J	POINT10	1 - 999	500
K	POINT11	1 - 999	500
L	POINT12	1 - 999	500
M	POINT13	1 - 999	500
N	POINT14	1 - 999	500
O	POINT15	1 - 999	500
P	POINT16	1 - 999	500
Q	POINT17	1 - 999	500

## 67-26

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the target color balance of the printer mode auto color balance adjustment.
<b>Section</b>	Printer

**Operation/Procedure**

- 1) Select the target color balance with the touch panel.

Item/Display		Content	Default value
Target value table select	DEF1	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to Magenta. When this target is selected, the color balance is converted into natural gray color balance by the color table in an actual printer mode and print is made.	DEF 1
	DEF2	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to natural gray color balance. When this target is selected, the color balance is slightly shifted to Cyan by the color table in an actual copy mode and print is made.	
	DEF3	The engine color balance adjustment target in the automatic color balance operation is slightly shifted to Cyan. When this target is selected, the color balance is converted into the color balance with enhanced Cyan by the color table in an actual copy mode and print is made.	

<b>67-27</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the service target of the printer mode auto color balance adjustment.
<b>Section</b>	Printer

#### Operation/Procedure

- 1) Press [SETUP] key on the touch panel.
- 2) Place the printed color balance adjustment pattern sheet printed in SIM 67-25 on the document table.
- 3) Press [EXECUTE] key.  
The patch image of the adjustment pattern sheet is scanned.
- 4) Press [OK] key.  
The service target of the printer mode auto color balance adjustment is set according to the scanned adjustment pattern sheet patch images.  
The registered color balance and the density are displayed.  
Select a target color with [C] [M] [Y] [K] key.

#### Important

This simulation is executed only when the printer color balance is manually adjusted.

B	Point B target value
C	Point C target value
D	Point D target value
E	Point E target value
F	Point F target value
G	Point G target value
H	Point H target value
I	Point I target value
J	Point J target value
K	Point K target value
L	Point L target value
M	Point M target value
N	Point N target value
O	Point O target value
BASE	Background sampling value

<b>67-28</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the default of the service target of the printer mode auto color balance adjustment.
<b>Section</b>	Printer

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.  
The service target of the printer mode auto color balance adjustment is set to the default.  
The service color balance target and the color balance target for the user color balance adjustment are set to the same color balance as the factory color balance target.

<b>67-31</b>	
<b>Purpose</b>	Data clear
<b>Function (Purpose)</b>	Used to clear the printer calibration value.
<b>Section</b>	Printer

#### Operation/Procedure

- 1) Press [EXECUTE] key.
- 2) Press [YES] key.  
The printer calibration data (Halftone correction data) are cleared.  
(The printer color balance correction is canceled.)

<b>67-33</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to change the gamma of the printer screen.
<b>Section</b>	Printer

#### Operation/Procedure

- 1) Select a target change color with [K] [C] [M] [Y] key on the touch panel.
- 2) Select a target screen with [SCREEN] key.
- 3) Select a target adjustment density level with scroll key.
- 4) Enter the set value with 10-key.
- 5) Press [OK] key. (The set value is saved.)

When [EXECUTE] key is pressed, the check pattern in printed in the color balance and density corresponding to the adjustment value.

However, check pattern print-out cannot be made in the GDI printer mode. (Only the adjustment can be made.)

Item/Display		Content	Setting range	Default value
A	POINT1	Point 1	0 - 255	128
B	POINT2	Point 2	0 - 255	128
C	POINT3	Point 3	0 - 255	128
D	POINT4	Point 4	0 - 255	128
E	POINT5	Point 5	0 - 255	128
F	POINT6	Point 6	0 - 255	128
G	POINT7	Point 7	0 - 255	128
H	POINT8	Point 8	0 - 255	128
I	POINT9	Point 9	0 - 255	128
J	POINT10	Point 10	0 - 255	128
K	POINT11	Point 11	0 - 255	128
L	POINT12	Point 12	0 - 255	128
M	POINT13	Point 13	0 - 255	128
N	POINT14	Point 14	0 - 255	128
O	POINT15	Point 15	0 - 255	128
P	POINT16	Point 16	0 - 255	128
Q	POINT17	Point 17	0 - 255	128

#### 18cpm/20cpm/23cpm/31cpm(G) machine

#### PCL/PS printer

Display	Content
SCREEN1	600dpi 1bit Photo
SCREEN2	600dpi 1 bit Graphics
SCREEN3	600dpi 4 bit Photo
SCREEN4	600dpi 4 bit Graphics
SCREEN7	B/W 600dpi 1 bit
SCREEN8	B/W 600dpi 4 bit
SCREEN10	Gloss 600dpi 4bit
HEAVY PAPER	Printer paper kind manual gamma correction (Heavy paper)

#### GDI printer

Display	Content	Button
SCREEN1	600dpi 1bit Low (Photo)	CMYK
SCREEN2	600dpi 1bit High (Graphics)	CMYK
SCREEN3	600dpi 2bit Low (Photo)	CMYK
SCREEN4	600dpi 2bit High (Graphics)	CMYK
SCREEN5	B/W 600dpi 1bit	K
SCREEN6	B/W 600dpi 2bit Low (Photo)	K
SCREEN7	B/W 600dpi 2bit High (Graphics)	K
SCREEN8	Gloss 600dpi 1bit	CMYK
SCREEN9	Gloss 600dpi 2bit	CMYK

## 26cpm/36cpm/31cpm(A) machine

Display	Content
HEAVY PAPER	Heavy paper
SCREEN1	600dpi 1bit Photo
SCREEN2	600dpi 1bit Graphics
SCREEN3	600dpi 4bit Photo
SCREEN4	600dpi 4bit Graphics
SCREEN5	1200dpi 1bit Photo
SCREEN6	1200dpi 1bit Graphics
SCREEN7	B/W 600 dpi 1bit
SCREEN8	B/W 600 dpi 4bit
SCREEN9	B/W 1200dpi 1bit
SCREEN10	Gloss 600 dpi 4bit

67-34

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the density correction in the printer high density section. (Support for the high density section tone gap)
<b>Section</b>	Printer

### Operation/Procedure

- 1) Enter the set value with 10-key.

0	Enable
1	Disable

- 2) Press [OK] key. (The set value is saved.)

Item/Display		Content		Setting range	Default value
A	CMY (0: ENABLE 1: DISABLE)	0	CMY engine highest density correction mode: Enable	0 - 1	0
		1	CMY engine highest density correction mode: Disable		
B	K (0: ENABLE 1: DISABLE)	0	K engine highest density correction mode: Enable	0 - 1	1
		1	K engine highest density correction mode: Disable		
C	CYAN MAX TARGET	Scanner target value for CYAN maximum density correction		0 - 999	500
D	MAGENTA MAX TARGET	Scanner target value for MAGENTA maximum density correction		0 - 999	500
E	YELLOW MAX TARGET	Scanner target value for YELLOW maximum density correction		0 - 999	500
F	BLACK MAX TARGET	Scanner target value for BLACK maximum density correction		0 - 999	500

- When tone gap is generated in the high density section, set items A and B to "0."  
The density in the high density section is decreased, but tone gap is reduced.
- To increase the density in the high density section further, set items A and B to "1."  
The tone gap may occur in high density part.

### Important

Do not change the values of items C, D, E, and F. If these values are changed, the density in the high density area is changed.

67-36

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the density in the low density section.
<b>Section</b>	Printer

### Operation/Procedure

- 1) Enter the adjustment value using the 10-key.
- 2) Press [OK] key.

When the adjustment value is increased, the low density images are strongly reduced. When the adjustment value is decreased, the low density are images are weakly reproduced.

When tone gap is generated in the low density section (highlight section), changing this adjustment value may improve the trouble.

Item/Display		Content	Setting range	Default value
A	A PATCH INPUT	A patch input value	0 - 13	1

67-45

<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to adjust the printer image filter and trapping.
<b>Section</b>	Printer

### Operation/Procedure

- 1) Select an adjustment item with the scroll key.
- 2) Enter the set value.
- 3) Press [OK] key.

Item/Display	Content	Setting range	Default value	NOTE	
A	SHARPNESS: COLOR PRINT	Color print	0 - 4	2	The greater the set value is, the stronger the filter enhancement is. The smaller the set value is, the stronger the filter smoothness is. (0: Soft High, 1: Soft Low, 2: Center, 3: Sharp Low, 4: Sharp High)
B	SHARPNESS: B/W PRINT	Monochrome print	0 - 4	2	
C	TRAPPING: CMY (PCL & DIRECTPRINT)	CMY (PCL, Direct Print)	0 - 5	3	The greater the set value is, the stronger the trapping is. (0: OFF, (Low) 1 < 2 < 3 < 4 < 5) (The target is vector images. There is no effect for the raster images.) However, the sharpness also varies.
D	TRAPPING: K (PCL & DIRECTPRINT)	K (PCL, Direct Print)	0 - 5	3	
E	TRAPPING: CMY (PS)	CMY (PS)	0 - 5	3	
F	TRAPPING: K (PS)	K (PS)	0 - 5	0	
G	TRAPPING: CMY (XPS)	CMY (XPS)	0 - 5	0	
H	TRAPPING: K (XPS)	K (XPS)	0 - 5	0	

<b>67-52</b>	
<b>Purpose</b>	Adjustment/Setup
<b>Function (Purpose)</b>	Used to set the default of the gamma of the printer screen.
<b>Section</b>	Printer

#### Operation/Procedure

- 1) Select a target default setting mode with the touch panel.  
Press [ALL] key to select all the modes.
- 2) Press [EXECUTE] key and press [YES] key.

When the printer screen gamma was changed by SIM 67-33, SIM67-54, it is reset to the default.

#### 18cpm/20cpm/23cpm/31cpm(G) machine

##### PCL/PS printer

Item/Display		Content
Screen	HEAVYPAPER	Heavy paper screen
		Printer heavy paper automatic density correction amount
	600DPI_1BIT	SCREEN1 (600dpi 1bit Photo) SCREEN2 (600dpi 1bit Graphics)
	B/W	SCREEN7 (600dpi 1bit Graphics)
		SCREEN8 (600dpi 1bit Graphics)
		SCREEN9 (600dpi 1bit Graphics)
		Printer B/W toner save automatic density correction amount
	GLOSSPAPER	SCREEN10 (Glossy paper screen)

##### GDI printer

Item/Display		Content
Screen	600DPI_1BIT	SCREEN1 (600dpi 1bit Low (Photo)) SCREEN2 (600dpi 1bit High (Graphics))
	B/W	SCREEN5 (B/W 600dpi 1bit) SCREEN6 (B/W 600dpi 2bit Low (Photo)) SCREEN7 (B/W 600dpi 2bit High (Graphics))
	GLOSSPAPER	SCREEN8 (Gloss 600dpi 1bit) SCREEN9 (Gloss 600dpi 2bit)

#### 26cpm/36cpm/31cpm(A) machine

Item/Display		Content
Screen	HEAVYPAPER	Heavy paper screen
		Printer heavy paper automatic density correction amount
	1200DPI_1BIT	SCREEN5 (1200dpi 1bit Photo) SCREEN6 (1200dpi 1bit Graphics)
	600DPI_1BIT	SCREEN1 (600dpi 1bit Photo) SCREEN2 (600dpi 1bit Graphics)
	B/W	SCREEN7 (600dpi 1bit Graphics)
		SCREEN8 (600dpi 1bit Graphics)
		SCREEN9 (600dpi 1bit Graphics)
		Printer B/W toner save automatic density correction amount
	GLOSSPAPER	SCREEN10 (Glossy paper screen)

<b>67-54</b>	
<b>Purpose</b>	Adjustment
<b>Function (Purpose)</b>	Printer color balance adjustment (Automatic adjustment for each dither (The adjustment is disable in a GDI printer.))
<b>Section</b>	Printer

#### Operation/Procedure

This simulation is used to adjust the color balance, the density, and the gradation in the monochrome mode, the heavy paper mode, the 1200dpi mode, and the 600dpi 1bit mode.

This simulation is used to improve image quality in these modes and images.

- 1) Press [EXECUTE] key. (A3 or 11" x 17" paper is automatically selected.)  
The color patch image (adjustment pattern) is printed out.
- 2) Set the color patch image (adjustment pattern) printed in the procedure 1) on the document table so that the thin lines on the printed color patch image (adjustment pattern) are on the left side. Place 5 sheets of white paper on the printed color patch image (adjustment pattern).
- 3) Press [EXECUTE] key.  
The color balance adjustment is automatically performed.  
The adjustment pattern is printed out. Check it for any abnormality.
- 4) Press [OK] key.  
The list of the adjustment items (for each dither) is displayed.
- 5) Select an adjustment item (for each dither).

Select item (Mode)	Content
Heavy Paper	Adjustment item to improve the color balance in the heavy paper mode
B/W	Adjustment item to improve the density and gradation in the monochrome mode
Glossy	Adjustment item to improve the color balance in glossy paper mode
1200dpi 1bit	Adjustment item to improve the color balance in 1200dpi mode

- 6) Press [EXECUTE] key. (A3 or 11" x 17" paper is automatically selected.)  
The color patch image (adjustment pattern) is printed out.
- 7) Set the color patch image (adjustment pattern) printed in the procedure 6) on the document table so that the thin lines on the printed color patch image (adjustment pattern) are on the left side. Place 5 sheets of white paper on the printed color patch image (adjustment pattern).
- 8) Press [EXECUTE] key.  
The color balance adjustment is automatically performed, and the color balance check patch image is printed out.
- 9) When [OK] key is pressed, the adjustment result is registered and the adjustment mode is terminated. When [EXECUTE] key is pressed, the adjustment result is registered and the screen is shifted to the other item (Mode/Image) select menu.  
To execute the adjustment of the other item (Mode/Image), press [EXECUTE] key.  
After completion of all the adjustments of the items (Mode/Image), press [OK] key, and the adjustment results are registered.
- 10) Make a print, and check the print image quality.

#### Note

Use SIM67-52 to reset the adjustment values to the default values.

## [6] TROUBLESHOOTING

### 1. Error code and troubleshooting

#### A. General

When a trouble occurs in the machine or when the life of a consumable part is nearly expired or when the life is expired, the machine detects and displays it on the display section. This allows the user and the serviceman to take the suitable action. In case of a trouble, this feature notifies the occurrence of a trouble and stops the machine to minimize the damage.

#### B. Function and purpose

- 1) Securing safety. (The machine is stopped on detection of a trouble.)
- 2) The damage to the machine is minimized. (The machine is stopped on detection of a trouble.)
- 3) By displaying the trouble content, the trouble position can be quickly identified. (This allows to perform an accurate repair, improving the repair efficiency.)
- 4) Preliminary warning of running out of consumable parts allows to arrange for new parts in advance of running out. (This avoids stopping of the machine due to running out the a consumable part.)

#### C. Self diag message kinds

The self diag messages are classified as shown in the table below.

Class 1	User	Warning of troubles which can be recovered by the user. (Paper jam, consumable part life expiration, etc.)
	Service	Warning of troubles which can be recovered only by a serviceman. (Motor trouble, maintenance, etc.)
	Others	-
Class 2	Warning	Warning to the user, not a machine trouble (Preliminary warning of life expiration of a consumable part, etc.)
	Trouble	Warning of a machine trouble. The machine is stopped.
	Others	-

#### D. Self diag operation

The machine always monitors its own state.

When the machine recognizes a trouble, it stops the operation and displays the trouble message.

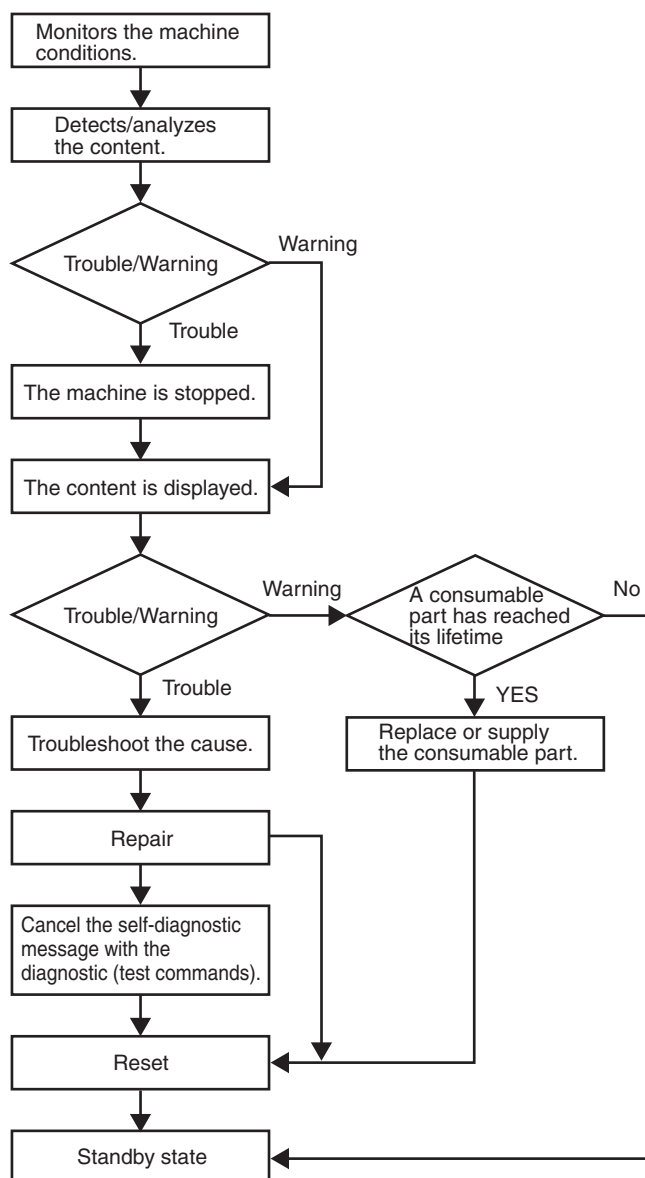
A warning message is displayed when a consumable part life is nearly expired or is expired.

When a warning message is displayed, the machine may be or may not be stopped.

The trouble messages and the warning messages are displayed by the LCD and lamp.

Some trouble messages are automatically cleared when the trouble is repaired. Some other troubles must be cleared by a simulation.

Some warning messages of consumable parts are automatically cleared when the trouble is repaired. Some other warning messages must be cleared by a simulation.





## E. Breakdown sequence

### (1) Error code and operatable mode

18cpm/20cpm machine

Trouble content		Judgment block	Trouble code (20cpm machine)	Operatable mode									
				Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host	
FAX board trouble	• FAX board breakdown	MFP	F6 (00, 01, 04, 21, 30, 97, 98)	○	○	○	○	○	○	—	—	—	
HDD trouble	• SD card breakdown		E7(07)	×	×	×	×	×	×	×	×	×	×
	• HDD breakdown		E7(03)	×	×	×	×	×	×	×	×	×	×
	• HDD-ASIC breakdown		E7(04)	×	×	×	×	×	×	×	×	×	×
Scanner communication trouble	• SCU communication error		A0(02) E7(80)	×	×	×	×	○	○	×	○	○	
Engine communication trouble	• PCU communication error		A0(01) E7(90)	×	×	×	×	×	×	×	×	○	
Option communication trouble	• ACU communication error		A0(04)	×	×	×	×	×	×	×	×	○	
Printer port system trouble	• Printer port system trouble		F9(91,92)	○	×	×	○	×	△	○	○	○	
Backup battery voltage fall trouble	• Backup battery voltage fall		U1(01)	×	×	×	×	×	×	×	×	○	
Operation disable trouble 1	• Controller fan trouble		L4(30)	×	×	×	×	×	×	×	×	×	
Operation disable trouble 2	• External serial I/ F communication error (RIC)		U7(50,51)	×	×	×	×	×	×	×	×	○	
	• Memory error (included not installed the expansion RAM)		U2 (00, 05, 10, 11, 24, 40, 41, 42)	×	×	×	×	×	×	×	×	△15	
	• Connection trouble (Model data discrepancy) (MFPC detection)		A0 (10, 11, 15, 16, 20) E7 (60, 61, 65, 89)	×	×	×	×	×	×	×	×	×	
	• Serial number data error		U2 (30)	×	×	×	×	×	×	×	×	×	
	• HDD registration data check sum error		U2 (50)	×	×	×	×	×	×	×	×	○	
Operation disable trouble 3	• Memory check error when booting		E7 (95, 96)	×	×	×	×	×	×	×	×	○	
	• Image memory trouble, decode error		E7 (01, 91, 92, 93, 94)	×	×	×	×	×	×	×	×	○	
	• Image memory trouble, decode error (Image high compression)			×	△17	×	×	×	○	○	○	○	
Operation disable trouble 4	• Personal counter connection trouble		PC (00)	×	×	×	×	×	×	×	×	○	
Power controller trouble	• Power controller error		L8 (20)	×	×	×	×	×	×	×	×	○	
Special function trouble	• Watermark data error		P1 (00, 01, 02) U2 (60)	○	○	○	○	○	○	○	○	○	

Trouble content		Judgment block	Trouble code (20cpm machine)	Operatable mode								
				Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host
Laser trouble	• LSU breakdown	PCU	E7 (20, 28, 29) L6 (10)	×	×	×	×	×	×	×	×	○
Engine trouble 1	• Connection trouble (Model data discrepancy) (PCU detection)		A0 (21) E7 (50, 55) F1 (50)	×	×	×	×	×	×	×	×	×
Engine trouble 2	• PCU troubles (motor, fusing, etc.)		C1 (10,14) C4 (00) F2 (22, 40, 64, 70, 74, 91) H2 (00, 01, 02, 03) H3 (00, 01, 02) H4 (00, 01, 02) H5 (01) H7 (10) L4 (02, 03, 04, 05, 06, 11, 12, 16, 31, 32, 35, 43, 50, 51) L8 (01) U2 (90, 91)	×	×	×	×	×	×	×	×	○
Process system trouble	• LSU/Process system breakdown		E7 (21, 22, 23) F2 (23, 24, 25, 41, 42, 43, 65, 66, 67, 71, 72, 73, 75, 76, 77, 92, 93, 94)	×	×	×	×	×	×	×	×	○
Paper feed tray 1 trouble	• Paper feed tray 1 breakdown		F3 (12)	△3	○	○	○	△3	△3	○	△3	○
Paper feed tray 2 trouble	• Paper feed tray 2 breakdown		F3 (22)	△3	○	○	○	△3	△3	○	△3	○
Paper feed tray 3 trouble	• Paper feed tray 3 breakdown		U6 (01)	△3	○	○	○	△3	△3	○	△3	○
Paper feed tray 4 trouble	• Paper feed tray 4 breakdown		U6 (02)	△3	○	○	○	△3	△3	○	△3	○
Paper feed tray 5 trouble	• Paper feed tray 5 breakdown		U6 (52)	△3	○	○	○	△3	△3	○	△3	○
Paper feed tray other troubles	• Paper feed tray other breakdown		U6 (00, 10, 50)	△11	○	○	○	△11	△11	○	△11	○
Staple trouble	• Staple breakdown		F1 (08, 10)	△4	△4	△4	△4	△4	△4	△4	△4	○
Saddle stitch section trouble	• Saddle stitch section breakdown			△4	△4	△4	△4	△4	△4	△4	△4	○
Finisher trouble	• After-process breakdown		F1 (00, 03, 15, 19, 20, 21, 33, 34, 37)	△4	△4	△4	△4	△4	△4	△4	△4	○
Other troubles	• Other troubles		EE (EC, EL, EU)	○	○	○	○	○	○	○	○	○
Process control trouble	• Process control breakdown (PCU detection)		F2 (39, 49, 50, 51, 58, 78)	○	○	○	○	○	○	○	○	○
Operation disable trouble	• Connection trouble (Model data discrepancy) (SCU detection)	SCU	A0 (22)	×	×	×	×	×	×	×	×	×
SCU CPT ASIC trouble	• SCU CPT ASIC error		UC (02)	△9	△9	△9	△9	○	○	△9	○	○
SCU ASIC trouble (SCU detection)	• SCU ASIC error (SCU detection)		UC (20)	×	×	×	×	○	○	×	○	○
Scanner trouble 1	• SCU EEPROM error		U2 (80, 81)	×	×	×	×	○	○	×	○	○
Scanner trouble 2	• Scanner section breakdown (mirror motor, lens, copy lamp)		L1 (00) L3 (00)	×	×	×	×	○	○	×	○	○
CCD trouble	• CCD breakdown (shading, etc.)		E7 (10, 11, 14)	×	×	×	×	○	○	×	○	○

**23cpm/26cpm/31cpm/36cpm machine**

Trouble content		Judgment block	Trouble code (23cpm/31cpm(G) machine)	Trouble code (26cpm/36cpm/31cpm(A) machine)	Operatable mode								
					Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host
FAX board trouble	• FAX board breakdown	MFP	F6 (00, 01, 04, 21, 30, 97, 98)	F6 (00, 01, 04, 21, 30, 97, 98)	○	○	○	○	○	○	—	—	—
HDD trouble	• SD card breakdown		E7 (07)	E7 (07)	×	×	×	×	×	×	×	×	×
	• HDD breakdown		E7 (03)	E7 (03)	×	×	×	×	×	×	×	×	×
	• HDD-ASIC breakdown		E7 (04)	E7 (04)	×	×	×	×	×	×	×	×	×
Scanner communication trouble	• SCU communication error		A0 (02) E7 (80)	A0 (02) E7 (80)	×	×	×	×	○	○	×	○	○
Engine communication trouble	• PCU communication error		A0 (01) E7 (90)	A0 (01) E7 (90)	×	×	×	×	×	×	×	×	○
Option communication trouble	• ACU communication error		A0 (04)	A0 (04, 05)	×	×	×	×	×	×	×	×	○
Printer port system trouble	• Printer port system trouble		F9 (91, 92)	F9 (91, 92)	○	×	×	○	×	△	○	○	○
Backup battery voltage fall trouble	• Backup battery voltage fall		U1 (01)	U1 (01)	×	×	×	×	×	×	×	×	○
Operation disable trouble 1	• Controller fan trouble		L4 (30)	L4 (30)	×	×	×	×	×	×	×	×	×
Operation disable trouble 2	• External serial I/F communication error (RIC)		U7 (50, 51)	U7 (50, 51)	×	×	×	×	×	×	×	×	○
	• Memory error (included not installed the expansion RAM)		U2 (00, 05, 10, 11, 24, 40, 41, 42)	U2 (00, 11, 40, 41, 42)	×	×	×	×	×	×	×	×	△15
	• Connection trouble (Model data discrepancy) (MFPC detection)		A0 (10, 11, 15, 16, 20) E7 (60, 61, 65, 89)	A0 (10, 11, 14, 15, 16, 17, 20) E7 (60, 61, 65, 89)	×	×	×	×	×	×	×	×	×
	• Serial number data error		U2 (30)	U2 (30)	×	×	×	×	×	×	×	×	×
	• HDD registration data check sum error		U2 (50)	U2 (50)	×	×	×	×	×	×	×	×	○
Operation disable trouble 3	• Memory check error when booting		E7 (95, 96)	E7 (95, 96)	×	×	×	×	×	×	×	×	○
	• Image memory trouble, decode error		E7 (01, 49, 91, 92, 93, 94)	E7 (01, 49, 91, 92, 93, 94)	×	×	×	×	×	×	×	×	○
	• Image memory trouble, decode error (Image high compression)			E7 (42, 46, 48)	×	△17	×	×	×	○	○	○	○
Operation disable trouble 4	• Personal counter connection trouble		PC (00)	PC (00)	×	×	×	×	×	×	×	×	○
Power controller trouble	• Power controller error		L8 (20)	L8 (20)	×	×	×	×	×	×	×	×	○
Special function trouble	• Watermark data error		U2 (60) P1 (00, 01, 02)	U2 (60) P1 (00, 01, 02)	○	○	○	○	○	○	○	○	○

Trouble content		Judgment block	Trouble code (23cpm/31cpm(G) machine)	Trouble code (26cpm/36cpm/31cpm(A) machine)	Operatable mode										
					Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host		
Laser trouble	• LSU breakdown	PCU	E7 (20, 28, 29) L6 (10)	E7 (20, 24, 28, 29, A0) L6 (10)	×	×	×	×	×	×	×	×	×	○	
Engine trouble 1	• Connection trouble (Model data discrepancy) (PCU detection)		A0 (21) E7 (50, 55) F1 (50)	A0 (21) E7 (50, 55) F1 (50)	×	×	×	×	×	×	×	×	×	×	
Engine trouble 2	• PCU troubles (motor, fusing, etc.)		C1 (10, 14) C4 (00) F2 (22, 40, 64, 70, 74, 91) H2 (00, 01, 02, 03) H3 (00, 01, 02) H4 (00, 01, 02, 30) H5 (01) H7 (10, 11, 12) L4 (02, 03, 04, 05, 06, 11, 12, 16, 31, 32, 35, 43, 50, 51) L8 (01) U2 (90, 91)	C1 (10, 14) C4 (00) F2 (22, 40, 64, 70, 74, 91) H2 (00, 01, 02, 03) H3 (00, 01, 02) H4 (00, 01, 02, 30) H5 (01) H7 (10, 11, 12) L4 (02, 03, 04, 05, 06, 07, 11, 12, 16, 29, 31, 32, 34, 35, 43, 50, 51) L8 (01) U2 (90, 91)	×	×	×	×	×	×	×	×	×	○	
Process system trouble	• LSU/Process system breakdown		E7 (21, 22, 23) F2 (23, 24, 25, 41, 42, 43, 65, 66, 67, 71, 72, 73, 75, 76, 77, 92, 93, 94)	E7 (21, 22, 23, 25, 26, 27, A1, A2, A3) F2 (23, 24, 25, 41, 42, 43, 65, 66, 67, 71, 72, 73, 75, 76, 77, 92, 93, 94)	×	×	×	×	×	×	×	×	×	×	○
Paper feed tray 1 trouble	• Paper feed tray 1 breakdown		F3 (12)	F3 (12)	△3	○	○	○	△3	△3	○	△3	*10	○	
Paper feed tray 2 trouble	• Paper feed tray 2 breakdown		F3 (22)	F3 (22)	△3	○	○	○	△3	△3	○	△3	*10	○	
Paper feed tray 3 trouble	• Paper feed tray 3 breakdown		U6 (01)	U6 (01)	△3	○	○	○	△3	△3	○	△3	*10	○	
Paper feed tray 4 trouble	• Paper feed tray 4 breakdown		U6 (02)	U6 (02)	△3	○	○	○	△3	△3	○	△3	*10	○	
Paper feed tray 5 trouble	• Paper feed tray 5 breakdown		U6 (52)	U6 (03, 09, 20, 21, 22, 51, 52)	△3	○	○	○	△3	△3	○	△3	*10	○	
Paper feed tray other troubles	• Paper feed tray other breakdown		U6 (00, 10, 50)	U6 (00, 10, 50)	△11	○	○	○	△11	△11	○	△11	*10	○	
Staple trouble	• Staple breakdown		F1 (08, 10)	F1 (08, 10)	△4	△4	△4	△4	△4	△4	△4	△4	*10	○	
Saddle stitch section trouble	• Saddle stitch section breakdown			F1 (31, 41, 43, 45, 47)	△4	△4	△4	△4	△4	△4	*10	△4	△4	○	
Finisher trouble	• After-process breakdown		F1 (00, 03, 15, 19, 20, 21, 33, 34, 37)	F1 (00, 03, 11, 15, 19, 20, 21, 32, 33, 34, 36, 37, 38, 39)	△4	△4	△4	△4	△4	△4	△4	△4	*10	○	
Other troubles	• Other troubles		EE (EC, EL, EU)	EE (EC, EL, EU)	○	○	○	○	○	○	○	○	○	○	
Process control trouble	• Process control breakdown (PCU detection)		F2 (39, 49, 50, 51, 58, 78)	F2 (39, 49, 50, 51, 58, 78)	○	*12	○	○	○	○	○	○	○	○	

Trouble content		Judgment block	Trouble code (23cpm/31cpm(G) machine)	Trouble code (26cpm/36cpm/31cpm(A) machine)	Operatable mode								
					Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host
Operation disable trouble	• Connection trouble (Model data discrepancy) (SCU detection)	SCU	A0 (22)	A0 (22)	×	×	×	×	×	×	×	×	×
SCU CPT ASIC trouble	• SCU CPT ASIC error		UC (02)	UC (02)	△9	△9	△9	△9	○	○	△9	○	○
SCU ASIC trouble (SCU detection)	• SCU ASIC error (SCU detection)		UC (20)	UC (20)	×	×	×	×	○	○	×	○	○
Scanner trouble 1	• SCU EEPROM error		U2 (80, 81)	U2 (80, 81)	×	×	×	×	○	○	×	○	○
Scanner trouble 2	• Scanner section breakdown (mirror motor, lens, copy lamp)		L1 (00) L3 (00)	L1 (00) L3 (00)	×	×	×	×	○	○	×	○	○
CCD trouble	• CCD breakdown (shading, etc.)		E7 (10, 11, 14)	E7 (10, 11, 14)	×	×	×	×	○	○	×	○	○

#### Error where only history data are saved

Trouble content	Judgment block	Trouble code	Operatable mode								
			Copy scan (including interruption)	Scan (Push)	Scan (Pull)	Scan-To HDD	Print	List print	FAX Send	FAX print	FAST Notification to host
Error history	PCU	F2 (45)	○	○	○	○	○	○	○	○	○
Error history	MFP	E7 (02)*20 U2 (05)*20	○	○	○	○	○	○	○	○	○

○: Operation enabled    ×: Operation disabled

△1: The operation is enabled in a line other than the trouble line.

△3: When detected during other than a job, the operation is enabled with a tray other than the trouble tray.

△4: When detected during other than a job, the operation is enabled in a section other than the trouble paper exit section. \* However, it is valid only when the escape tray setting has been made.

△9: When detected during other than a job, the operation is enabled in the black and white mode.

\*10: Since communication is enabled, reception can be transferred.

△11: When detected during other than a job, the operation is enabled in other than the DESK and the LCC.

\*12: A trouble message is displayed. (Example: Ready to copy. F2 trouble)

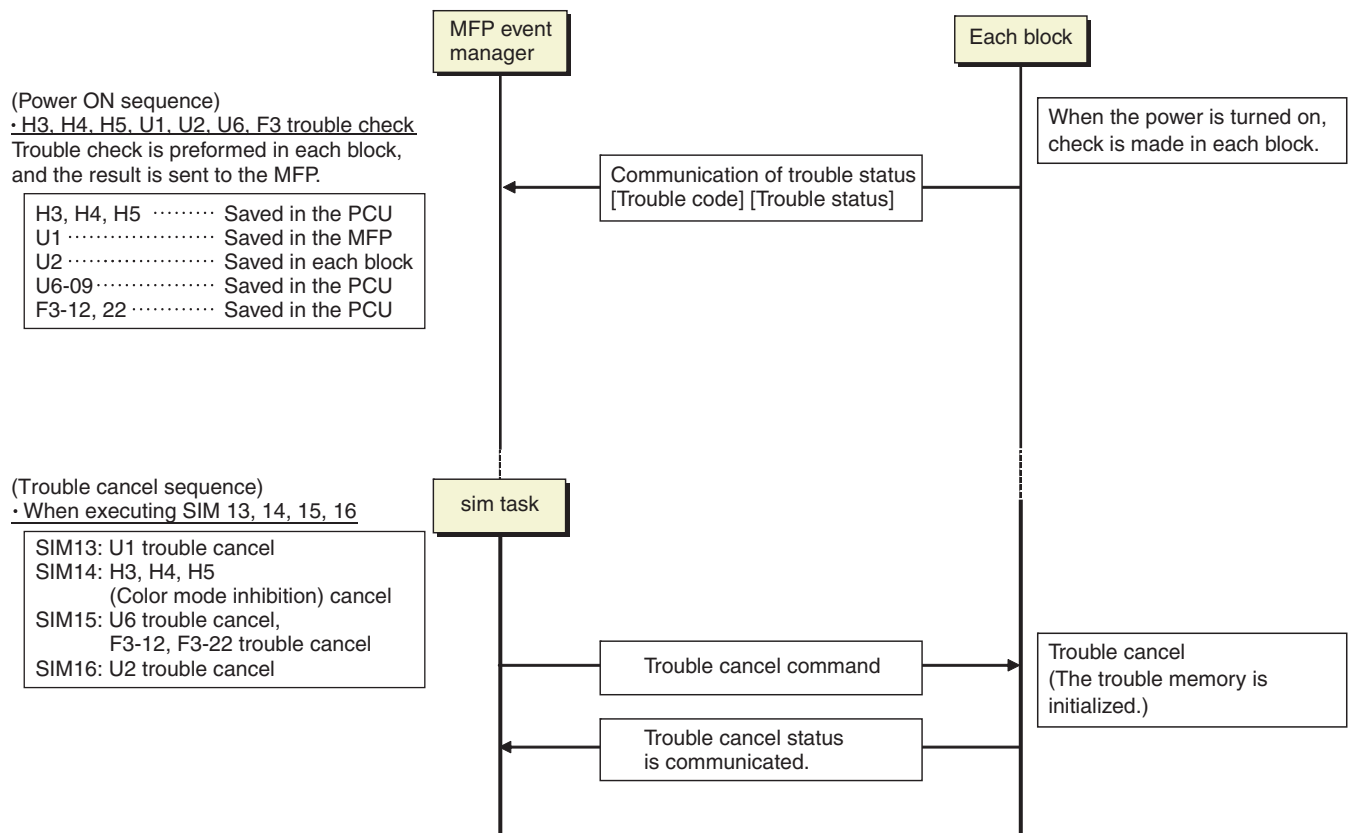
△15: FAST notification function (When in U2-22, trouble notification cannot be made. If there is no abnormality in the FAX software or the FAST data in U2-23, trouble notification can be made.)

△17: Job execution enable only in a format other than high compression PDF.

\*19: When the color mode is set to disable in the "Color mode disable setting" of the system setting, the operation is enabled in the black and white mode.

\*20: 26cpm/31cpm/36cpm machine only

## (2) Trouble detection sequence and trouble cancel sequence when turning on the power



The process has priority when the power is turned ON with the MFP.

When booting, two or more troubles in the list below may be detected. In this case, the trouble code of higher priority is displayed.

Process sequence	Error code	Content
First (Low priority) ↑ ↓ Last (High priority)	U2	60 Watermark check error
		50 HDD user authentication data check sum error
		30 MFPC PWB and PCU PWB manufacturing No. data inconsistency
		24 User authentication counter check sum error
		10 User authentication index check sum error
	A0	15 Incompatible DSK BOOT and program firmware
		20 Conflict firmware and EEPROM data version (MFP)
	U2	11 MFPC PWB EEPROM counter check sum error
		00 MFP EEPROM read/write error
	E7	48 Scanner expansion PWB (ACRE) ASIC memory error
		42 Image data trouble (Scanner expansion PWB (ACRE) ASIC)
		96 MFPC PWB DIMM memory check error (MFPC PWB)
		95 Printer PWB DIMM memory check error (PRINTER section)
	U1	01 Battery trouble
	E7	60 Combination error between PWB and firmware (MFPC PWB detection)
	A0	04 Scanner expansion PWB (ACU) (ACRE) ROM error

## F. Error code list

Trouble code		Trouble content	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
Main code	Sub code							
A0	01	PCU PWB ROM error	MFP			○		
	02	SCU PWB ROM error	MFP			○		
	04	Scanner expansion PWB (ACU) (ACRE) ROM error	MFP			○		
	05	Scanner expansion PWB (ACU) (ACRE) firmware error	MFP			○		
	10	Color profile error	MFP			○		
	11	Firmware version inconsistency (MFP - PCU)	MFP			○		
	14	Inconsistency between the MFP and the CPU firmware version	MFP			○		
	15	Incompatible DSK BOOT and program firmware	MFP			○		
	16	Data error of the energy-saving NIC controller firmware in the SD card	MFP			○		
	17	Inconsistency between the UI data and the CPU firmware version	MFP			○		
	20	Conflict firmware and EEPROM data version (MFP)	MFP			○		
	21	Conflict firmware and EEPROM data version (PCU)	PCU			○		
C1	10	Main charger trouble (Monochrome)	PCU			○		
	14	Main charger trouble (Color)	PCU			○		
C4	00	PTC trouble (TC high voltage trouble)	PCU			○		
E7	01	MFP image data error	MFP			○		
	02	HDD trouble when the mirroring kit is installed	MFP		○			
	03	HDD trouble / Mirroring kit error	MFP			○		
	04	HDD-ASIC error	MFP			○		
	07	SD card error	MFP			○		
	10	Shading error (Black correction)	SCU			○		
	11	Shading error (White correction)	SCU			○		
	14	CCD-ASIC error	SCU			○		
	20	LSU laser detection error (K)	PCU			○		
	21	LSU laser detection error (C)	PCU			○		
	22	LSU laser detection error (M)	PCU			○		
	23	LSU laser detection error (Y)	PCU			○		
	24	LSU LD driver error (K)	PCU			○		
	25	LSU LD driver error (C)	PCU			○		
	26	LSU LD driver error (M)	PCU			○		
	27	LSU LD driver error (Y)	PCU			○		
	28	LSU - PCU connection error	PCU			○		
	29	LSU ASIC frequency error	PCU			○		
	42	Image data trouble (Scanner expansion PWB (ACRE) ASIC)	MFP			○		
	46	Image data decode error (Scanner expansion PWB (ACRE) ASIC)	MFP			○		
	48	Scanner expansion PWB (ACRE) ASIC memory error	MFP			○		
	49	Water Mark data error	MFP			○		
	50	Combination error between PWB and firmware (PCU PWB detection)	PCU			○		
	55	PCU PWB information sum error	PCU			○		
	60	Combination error between PWB and firmware (MFPC PWB detection)	MFP			○		
	61	Combination error between the MFPC PWB and the PCU PWB (MFPC PWB detection)	MFP			○		
	65	MFP EEPROM sum check error	MFP			○		
	80	MFP - SCU PWB communication error	MFP			○		
	89	Communication error between MFPC PWB CPU and energy-saving NIC controller	MFP			○		
	90	MFP - PCU PWB communication error	MFP			○		
	91	FAX reception image data error	MFP				○	
	92	Copy image data error	MFP			○		
	93	Copy, image send, FAX, filing, print image data process error	MFP			○		
	94	Image file data process error (when importing file data)	MFP			○		
	95	Printer PWB DIMM memory check error	MFP			○		
	96	MFPC PWB DIMM memory check error	MFP			○		
	A0	LSU LD PWB EEPROM read/write error (K)	PCU			○		
	A1	LSU LD PWB EEPROM read/write error (C)	PCU			○		
	A2	LSU LD PWB EEPROM read/write error (M)	PCU			○		
	A3	LSU LD PWB EEPROM read/write error (Y)	PCU			○		
EE	EC	Automatic toner density adjustment error	PCU			○		
	EL	Automatic toner density adjustment error (Over toner)	PCU			○		
	EU	Automatic toner density adjustment error (Under toner)	PCU			○		
F1	00	Finisher - PCU PWB communication error	PCU		○			
	03	Finisher paper exit roller lifting operation trouble	PCU		○			
	08	Stapler shift trouble	PCU		○			
	10	Staple operation trouble	PCU		○			
	11	Finisher grip motor trouble	PCU		○			
	15	Finisher paper exit tray lift operation trouble	PCU		○			

Trouble code		Trouble content	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
Main code	Sub code							
F1	19	Finisher alignment operation trouble F	PCU		○			
	20	Finisher alignment operation trouble R	PCU		○			
	21	Finisher fan trouble	PCU		○			
	31	Finisher saddle motor trouble (Saddle stitch finisher)	PCU		○			
	32	Communication error between the finisher and the punch unit (Saddle stitch finisher)	PCU		○			
	33	Punch unit shift operation trouble	PCU		○			
	34	Punch operation trouble	PCU		○			
	36	Punch paper edge detection error	PCU		○			
	37	Finisher data backup RAM error	PCU		○			
	38	Punch data backup RAM error	PCU		○			
	39	Punch paper dust sensor error	PCU		○			
	41	Saddle paper positioning operation trouble	PCU		○			
	43	Saddle alignment operation trouble	PCU		○			
	45	Saddle staple trouble	PCU		○			
	47	Saddle paper transport motor trouble	PCU		○			
F2	50	Main unit - Finisher combination error	PCU		○			
	22	Discharge lamp trouble (K)	PCU					○
	23	Discharge lamp trouble (C)	PCU					○
	24	Discharge lamp trouble (M)	PCU					○
	25	Discharge lamp trouble (Y)	PCU					○
	39	Process thermistor trouble	PCU					○
	40	Toner density sensor trouble (K)	PCU					○
	41	Toner density sensor trouble (C)	PCU					○
	42	Toner density sensor trouble (M)	PCU					○
	43	Toner density sensor trouble (Y)	PCU					○
	45	Color image density sensor trouble	PCU					○
	49	LSU thermistor trouble	PCU					○
	50	K drum phase sensor trouble	PCU					○
	51	CL drum phase sensor trouble	PCU					○
	58	Temperature/humidity sensor trouble (HUD_M/TH_M)	PCU					○
	64	Toner supply operation trouble (K)	PCU					○
	65	Toner supply operation trouble (C)	PCU					○
	66	Toner supply operation trouble (M)	PCU					○
	67	Toner supply operation trouble (Y)	PCU					○
	70	Improper toner cartridge detection (K)	PCU					○
	71	Improper toner cartridge detection (C)	PCU					○
	72	Improper toner cartridge detection (M)	PCU					○
	73	Improper toner cartridge detection (Y)	PCU					○
	74	Toner cartridge CRUM error (K)	PCU					○
	75	Toner cartridge CRUM error (C)	PCU					○
	76	Toner cartridge CRUM error (M)	PCU					○
	77	Toner cartridge CRUM error (Y)	PCU					○
	78	Registration/BK image density sensor trouble (Transfer belt substrate reflection rate abnormality)	PCU					○
	91	High density process control high voltage error (K)	PCU					○
	92	High density process control high voltage error (C)	PCU					○
	93	High density process control high voltage error (M)	PCU					○
	94	High density process control high voltage error (Y)	PCU					○
F3	12	Paper feed tray 1 lift operation trouble	PCU	○				
	22	Paper feed tray 2 lift operation trouble	PCU	○				
F6	00	MFPC PWB - FAX communication trouble	MFP				○	
	01	FAX control PWB EEPROM read/write error	FAX				○	
	04	FAX MODEM operation trouble	FAX				○	
	21	Improper combination of TEL/LIU PWB and FAX soft switch	MFP				○	
	30	FAX 1-chip microprocessor access error (FAX detection)	MFP				○	
	97	Incompatibility between FAX control PWB and the main machine	MFP				○	
	98	Incompatibility between the FAX control PWB destination and the main machine destination	MFP				○	
F9	91	Communication error between MFP and the printer section when booting	MFP					
	92	Printer (section) PWB hardware error	PRINTER (section) PWB			○		
H2	00	Thermistor open trouble (TH_UM_AD2)	PCU	○				
	01	Thermistor open trouble (TH_LM)	PCU	○				
	02	Thermistor open trouble (TH_US)	PCU	○				
	03	Thermistor open trouble (TH_UM_AD1)	PCU	○				



Trouble code		Trouble content	Trouble detection	Mechanism	Option	Electricity	FAX	Supply
Main code	Sub code							
H3	00	Fusing section high temperature trouble (TH_UM)	PCU	○				
	01	Fusing section high temperature trouble (TH_LM)	PCU	○				
	02	Fusing section high temperature trouble (TH_US)	PCU	○				
H4	00	Fusing section low temperature trouble (TH_UM_AD2)	PCU	○				
	01	Fusing section low temperature trouble (TH_LM)	PCU	○				
	02	Fusing section low temperature trouble (TH_US)	PCU	○				
H5	01	5 times continuous POD1 not-reach jam	PCU	○				
H7	10	Recovery error from low fuser temp. (TH_UM_AD2)	PCU	○				
	11	Recovery error from low fuser temp. (TH_LM)	PCU	○				
L1	00	Scanner feed trouble	SCU	○				
L3	00	Scanner return trouble	SCU	○				
L4	02	Paper feed motor trouble	PCU			○		
	03	Fusing motor trouble	PCU			○		
	04	Developing motor trouble (BLACK)	PCU			○		
	05	Developing motor trouble (COLOR)	PCU			○		
	06	Transfer unit lift trouble	PCU			○		
	07	Transfer belt motor trouble	PCU			○		
	11	Shift motor trouble	PCU			○		
	12	Secondary transfer separation trouble	PCU	○				
	16	Fusing pressure release trouble	PCU			○		
	31	Paper exit cooling fan trouble	PCU			○		
	32	Power source cooling fan trouble	PCU			○		
	34	LSU cooling fan trouble	PCU			○		
	35	Fusing cooling fan trouble	PCU			○		
	43	Paper exit cooling fan 2 trouble	PCU			○		
	50	Process fan trouble	PCU			○		
	51	Process fan 2 trouble	PCU			○		
L6	10	Polygon motor trouble	PCU			○		
L8	01	Full wave signal detection error	PCU			○		
	20	Communication error of MFPC PWB/LSU mother board	MFP			○		
P1	00	PCI communication error	MFP		○			
	01	PCI fan error	MFP		○			
	02	Plasma generating device error	MFP		○			
PC	-	Personal counter not detected	MFP	○				
U1	01	Battery trouble	MFP			○		
U2	00	MFP EEPROM read/write error	MFP			○		
	05	HDD/MFPC PWB SRAM contents inconsistency (18cpm/20cpm/23cpm/31cpm(G) machine)	MFP			○		
	05	Erroneous detection of account management data / HDD internal authentication DB table error (26cpm/36cpm/31cpm(A) machine)	MFP			○		
	10	MFPC PWB SRAM user authentication index check sum error	MFP			○		
	11	MFPC PWB EEPROM counter check sum error	MFP			○		
	24	MFPC PWB SRAM memory user authentication counter check sum error	MFP			○		
	30	MFPC PWB and PCU PWB manufacturing No. data inconsistency	MFP			○		
	40	SD card system storage data area error	MFP			○		
	41	HDD system storage data area error	MFP			○		
	42	Machine adjustment data (system storage data area) error	MFP			○		
	50	HDD user authentication data check sum error	MFP			○		
	60	Watermark check error	MFP			○		
	80	SCU PWB EEPROM read/write error	SCU			○		
	81	SCU PWB EEPROM check sum error	SCU			○		
	90	PCU PWB EEPROM read/write error	PCU			○		
	91	PCU PWB EEPROM check sum error	PCU			○		
U6	00	PCU PWB - Paper feed desk (paper feed tray 3, 4) communication trouble	PCU			○		
	01	Desk paper feed tray 1 lift trouble	PCU		○			
	02	Desk paper feed tray 2 lift trouble	PCU		○			
	09	LCC lift motor trouble	PCU		○			
	10	Desk paper feed unit paper transport motor trouble	PCU		○			
	20	LCC control PWB - PCU PWB communication error	PCU		○			
	21	LCC transport motor trouble	PCU		○			
	22	LCC 24V power trouble	PCU		○			
	50	Desk - Main unit combination trouble	PCU		○			
	51	LCC - Main unit combination trouble	PCU		○			
	52	PCU PWB - Paper feed desk (paper feed tray 2) communication trouble	PCU			○		
U7	50	MFPC PWB - Vendor machine communication error	MFP			○		
	51	Vendor machine error	MFP			○		
UC	02	CPT - ASIC error	SCU			○		
	20	DOCC ASIC error	SCU			○		

## G. Details of error codes and countermeasures

### A0-01 PCU PWB ROM error

Trouble content	
Detail	MFP
Cause	The firmware version-up is not completed properly by interruption of the power during the version-up operation, etc. PCU PWB trouble.
Check & Remedy	Use SIM49-1 to perform the firmware version-up procedure again. Replace the PCU PWB.

### A0-02 SCU PWB ROM error

Trouble content	
Detail	MFP
Cause	The firmware version-up is not completed properly by interruption of the power during the version-up operation, etc. SCU PWB trouble.
Check & Remedy	Use SIM49-1 to perform the firmware version-up procedure again. Replace the SCU PWB.

### A0-04 Scanner expansion PWB (ACU) (ACRE) ROM error

Trouble content	
Detail	MFP
Cause	Scanner expansion PWB (ACU) (ACRE) ROM data error. An error occurs during firmware upgrading for some reasons.
Check & Remedy	Perform firmware upgrading again.

### A0-05 Scanner expansion PWB (ACU) (ACRE) firmware error

Trouble content	
Detail	MFP
Cause	Improper firmware A firmware of a different model is installed. A ROM of a different model is installed.
Check & Remedy	Replace the ROM with a proper one. Write the proper firmware. (Upgrade to the proper firmware.)

### A0-10 Color profile error

Trouble content	
Detail	MFP
Cause	The content of the color profile is abnormal. Combination error between the MFPC PWB firmware and the color profile
Check & Remedy	Upgrade the firmware collectively. Replace the MFPC PWB.

### A0-11 Firmware version inconsistency (MFP - PCU)

Trouble content	
Detail	MFP
Cause	Firmware combination error between the MFP and the PCU.
Check & Remedy	Install the firmware in the all-firmware version-up mode.

### A0-14 Inconsistency between the MFP and the CPU firmware version

Trouble content	
Detail	MFP
Cause	Combination error between the MFP and the CPU UI firmware version.
Check & Remedy	Install the firmware in the all-firmware version-up mode.

### A0-15 Incompatible DSK BOOT and program firmware

Trouble content	
Detail	MFP
Cause	Installation of the normal firmware was performed with a security kit enable.
Check & Remedy	Stop installation of the normal firmware.

### A0-16 Data error of the energy-saving NIC controller firmware in the SD card

Trouble content	
Detail	MFP
Cause	SD card trouble. MFPC PWB trouble.
Check & Remedy	Reinstall the firmware. Replace the SD card. Replace the MFPC PWB.

### A0-17 Inconsistency between the UI data and the CPU firmware version

Trouble content	
Detail	MFP
Cause	Combination error between the UI contents data and the CPU UI firmware version.
Check & Remedy	Install the firmware in the all-firmware version-up mode.

### A0-20 Conflict firmware and EEPROM data version (MFP)

Trouble content	
Detail	MFP
Cause	Inconsistency between the MFP firmware version and the EEPROM data version.
Check & Remedy	Check the combination of the firmware.

## A0-21 Conflict firmware and EEPROM data version (PCU)

Trouble content	
Detail	PCU
Cause	Inconsistency between the PCU firmware version and the EEPROM data version.
Check & Remedy	Check the combination of the firmware.

## A0-22 Conflict firmware and EEPROM data version (SCU)

Trouble content	
Detail	SCU
Cause	Inconsistency between the SCU firmware version and the EEPROM data version.
Check & Remedy	Check the combination of the firmware.

## C1-10 Main charger trouble (Monochrome)

Trouble content	
Detail	PCU
Cause	The main charger unit (BK) is not installed properly. There is an abnormality in the main charger unit (BK). The developer unit (KCMY) is not installed properly. There is an abnormality in the developer unit (KCMY). Disconnection of the high voltage MC PWB connector. Breakage of the high voltage harness. High voltage MC PWB trouble. PCU PWB trouble.
Check & Remedy	Check the output of the main charger with SIM8-2. Check the output of the developing bias with SIM8-1. Check disconnection of the main charger./Replace. Check disconnection of the developer unit./Replace. Check disconnection of the high voltage MC PWB connector./Replace. Replace the high voltage MC PWB. Replace the PCU PWB.

## C1-14 Main charger trouble (Color)

Trouble content	
Detail	PCU
Cause	The main charger unit (CMY) is not installed properly. There is an abnormality in the main charger unit (CMY). Disconnection of the high voltage MC PWB connector. Breakage of the high voltage harness. High voltage MC PWB trouble. PCU PWB trouble.
Check & Remedy	Check the output of the main charger with SIM8-2. Check disconnection of the main charger./Replace. Check disconnection of the high voltage MC PWB connector./Replace. Replace the high voltage MC PWB. Replace the PCU PWB.

## C4-00 PTC trouble (TC high voltage trouble)

Trouble content	
Detail	PCU
Cause	The PTC unit is not installed properly./Trouble. The primary transfer unit is not installed properly./Trouble. The secondary transfer unit is not installed properly./Trouble. High voltage TC PWB trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Replace the PTC unit. Replace the primary transfer unit. Replace the secondary transfer unit. Check disconnection of the high voltage TC PWB connector./Replace. Replace the high voltage TC PWB. Replace the PCU PWB.

## E7-01 MFP image data error

Trouble content	
Detail	MFP
Cause	Image data transfer error in the MFPC PWB. MFPC PWB trouble.
Check & Remedy	Check connection of the connector and the harness of the MFPC PWB. Check or replace the MFPC PWB.

## E7-02 HDD trouble when the mirroring kit is installed

Trouble content	
Detail	MFP
Cause	When installing the mirroring kit, the HDD of the machine or the HDD of the mirroring kit breaks down or connection fails. <ul style="list-style-type: none"> <li>Defective installation of the mirroring kit</li> <li>Breakdown of the HDD of the mirroring kit</li> <li>Breakdown of the HDD of</li> <li>Defective connection between the HDD and the mirroring kit harness</li> <li>MFP PWB trouble</li> </ul>
Check & Remedy	<ul style="list-style-type: none"> <li>Use SIM62-20 to check the trouble.</li> <li>Check installation of the mirroring kit (connector and harness), and replace if necessary.</li> <li>Replace the broken HDD.</li> <li>Replace the mirroring kit.</li> <li>Replace the MFP PWB.</li> </ul>

**E7-03 HDD trouble / Mirroring kit error**

Trouble content	
Detail	MFP
Cause	Connector, harness connection trouble in the MFPC PWB and HDD. HDD (error file management area) data abnormality (FAT breakage). MFPC PWB trouble.  (When the mirroring kit is installed) RAID PWB trouble. A HDD which has been used for mirroring is installed. Both HDD's go into trouble under the use environment of mirroring.
Check & Remedy	Check connection of the connector and the harness of the MFPC PWB and HDD. Use SIM62-2, 3 to check read/write operations of the HDD. Replace the HDD. Check or replace the MFPC PWB.  (When the mirroring kit is installed) Check the RAID PWB, and replace if necessary. Replace the HDD. (For details, refer to the HDD and RAID PWB replacement procedures under mirroring environment.)

**E7-04 HDD-ASIC error**

Trouble content	
Detail	MFP
Cause	HDD-ASIC trouble. (MFPC PWB trouble.) An error occurs in the HDD-ASIC self test when booting.
Check & Remedy	Check or replace the MFPC PWB.

**E7-07 SD card error**

Trouble content	
Detail	MFP
Cause	SD card trouble or contact error MFPC PWB trouble.
Check & Remedy	Replace the SD card. Check the SD card socket. Replace the MFPC PWB.

**E7-10 Shading error (Black correction)**

Trouble content	
Detail	SCU
Cause	Abnormality in the CCD black scan level when the scanner lamp is turned OFF. Improper installation of the harness to the CCD unit. CCD unit abnormality. SCU PWB abnormality.
Check & Remedy	Check connection of the harness to the CCD unit. Check the CCD unit. Check the SCU PWB.

**E7-11 Shading error (White correction)**

Trouble content	
Detail	SCU
Cause	Abnormality in the CCD white reference plate scan level when the scanner lamp is turned ON. Improper installation of the harness to the CCD unit. Dirt on the mirror, lens, and the reference white plate. Scanner lamp lighting trouble. Scanner lamp drive PWB trouble CCD unit abnormality. SCU PWB abnormality.
Check & Remedy	Check connection of the harness to the CCD unit. Check connection of the harness to the scanner lamp unit. Check or replace the scanner lamp. Check or replace the scanner lamp drive PWB. Clean or replace the mirror, the lens, and the reference white board. Check or replace the CCD unit. Check or replace the SCU PWB.

**E7-14 CCD-ASIC error**

Trouble content	
Detail	SCU
Cause	SCU PWB trouble.
Check & Remedy	Check the SCU PWB. Replace the SCU PWB.

**E7-20 LSU laser detection error (K)**

Trouble content	
Detail	PCU
Cause	Laser optical axis misalignment Reduced laser power, lighting error, laser diode trouble. LSU harness, connector trouble LSU trouble
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check or replace the LSU control PWB. Check connection of the LSU harness. Replace the LSU.

**E7-21 LSU laser detection error (C)**

Trouble content	
Detail	PCU
Cause	Laser optical axis misalignment Reduced laser power, lighting error, laser diode trouble. LSU harness, connector trouble LSU trouble
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check or replace the LSU control PWB. Check connection of the LSU harness. Replace the LSU.

**E7-22 LSU laser detection error (M)**

Trouble content	
Detail	PCU
Cause	Laser optical axis misalignment Reduced laser power, lighting error, laser diode trouble. LSU harness, connector trouble LSU trouble
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check or replace the LSU control PWB. Check connection of the LSU harness. Replace the LSU.

**E7-23 LSU laser detection error (Y)**

Trouble content	
Detail	PCU
Cause	Laser optical axis misalignment Reduced laser power, lighting error, laser diode trouble. LSU harness, connector trouble LSU trouble
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check or replace the LSU control PWB. Check connection of the LSU harness. Replace the LSU.

**E7-24 LSU LD driver error (K)**

Trouble content	
Detail	PCU
Cause	When lighting the LSU LD, initialization of the LD driver is not performed normally. Harness/connector trouble between the LD PWB and the LSU mother PWB. LD PWB trouble. LSU mother PWB trouble.
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check connection of the harness/connector between the LD PWB and the LSU mother PWB.

**E7-25 LSU LD driver error (C)**

Trouble content	
Detail	PCU
Cause	When lighting the LSU LD, initialization of the LD driver is not performed normally. Harness/connector trouble between the LD PWB and the LSU mother PWB. LD PWB trouble. LSU mother PWB trouble.
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check connection of the harness/connector between the LD PWB and the LSU mother PWB.

**E7-26 LSU LD driver error (M)**

Trouble content	
Detail	PCU
Cause	When lighting the LSU LD, initialization of the LD driver is not performed normally. Harness/connector trouble between the LD PWB and the LSU mother PWB. LD PWB trouble. LSU mother PWB trouble.
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check connection of the harness/connector between the LD PWB and the LSU mother PWB.

**E7-27 LSU LD driver error (Y)**

Trouble content	
Detail	PCU
Cause	When lighting the LSU LD, initialization of the LD driver is not performed normally. Harness/connector trouble between the LD PWB and the LSU mother PWB. LD PWB trouble. LSU mother PWB trouble.
Check & Remedy	Use SIM61-1 to check the operation of the LSU. Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check connection of the harness/connector between the LD PWB and the LSU mother PWB.

**E7-28 LSU - PCU connection error**

Trouble content	
Detail	PCU
Cause	Communication error between the CPU in the PCU PWB and the LSU control ASIC. Improper connection of the communication connector between the PCU PWB and the LSU control PWB (interface PWB). Harness trouble between the PCU PWB and the LSU control PWB (interface PWB) PCU PWB trouble. LSU control PWB trouble. LSU trouble. LSU mother PWB trouble.
Check & Remedy	Check connection of the connector and the harness between the PCU PWB and the LSU control PWB (interface PWB). Replace the LSU mother PWB. Replace the PCU PWB. Replace the LSU. Replace the LSU control PWB.

**E7-29 LSU ASIC frequency error**

Trouble content	
Detail	PCU
Cause	Oscillation abnormality of the external oscillator and the internal oscillating circuit used in the LSU ASIC. LSU ASIC abnormality on the LSU ASIC PWB.
Check & Remedy	Replace the LSU control PWB.

**E7-42 Image data trouble (Scanner expansion PWB (ACRE) ASIC)**

Trouble content	
Detail	MFP
Cause	An image data error occurs. An image data send error occurs. Scanner expansion PWB (ACRE) connection trouble. Scanner expansion PWB (ACRE) trouble. MFPC PWB trouble.
Check & Remedy	Check connection of the scanner expansion PWB (ACRE). Check the scanner expansion PWB (ACRE), and replace if necessary. Check the MFPC PWB, and replace if necessary.

**E7-46 Image data decode error (Scanner expansion PWB (ACRE) ASIC)**

Trouble content	
Detail	MFP
Cause	A decode error occurs while high compression PDF images are made. (garbled data) Scanner expansion PWB (ACRE) connection trouble. Scanner expansion PWB (ACRE) trouble. MFPC PWB trouble.
Check & Remedy	Check connection of the scanner expansion PWB (ACRE). Check the scanner expansion PWB (ACRE), and replace if necessary. Check the MFPC PWB, and replace if necessary.

**E7-48 Scanner expansion PWB (ACRE) ASIC memory error**

Trouble content	<ul style="list-style-type: none"><li>• DDR calibration error</li><li>• DIMM insertion trouble, etc.</li></ul>
Detail	MFP
Cause	Scanner expansion PWB (ACRE) DIMM trouble, memory slot trouble. Scanner expansion PWB (ACRE) DIMM insertion trouble. Scanner expansion PWB (ACRE) connection trouble. Scanner expansion PWB (ACRE) trouble. MFPC PWB trouble.
Check & Remedy	Check insertion of the scanner expansion PWB (ACRE) DIMM memory. Check the scanner expansion PWB (ACRE) DIMM memory, and replace if necessary. Check connection of the scanner expansion PWB (ACRE). Check the scanner expansion PWB (ACRE), and replace if necessary. Check the MFPC PWB, and replace if necessary.

**E7-49 Water Mark data error**

Trouble content	
Detail	MFP
Cause	Watermark data trouble. HDD trouble.
Check & Remedy	Use SIM49-5 to upload the watermark data. Replace the HDD.

**E7-50 Combination error between PWB and firmware (PCU PWB detection)**

Trouble content	
Detail	PCU
Cause	A PWB/firmware/LSU which is not compatible with the machine specifications is detected. PCU PWB trouble LSU trouble
Check & Remedy	Check the kind and the version of the firmware. Check or replace the LSU. Check or replace the PCU PWB.

**E7-55 PCU PWB information sum error**

Trouble content	PCU EEPROM PWB information sum error
Detail	PCU
Cause	PCU EEPROM sum check error. PCU EEPROM trouble. PCU EEPROM contact trouble.
Check & Remedy	Replace the PCU PWB. Replace the PCU EEPROM.

**E7-60 Combination error between PWB and firmware (MFPC PWB detection)**

Trouble content	
Detail	MFP
Cause	A PWB/firmware which is not compatible with the machine specifications is detected in the MFPC PWB. MFPC PWB trouble.
Check & Remedy	Check the kind and the version of the firmware. Check or replace the MFPC PWB.

**E7-61 Combination error between the MFPC PWB and the PCU PWB (MFPC PWB detection)**

Trouble content	
Detail	MFP
Cause	Combination error between the MFPC PWB and the PCU PWB. MFPC PWB trouble. PCU PWB trouble.
Check & Remedy	Check the combination between the MFPC PWB and the PCU PWB. Replace the MFPC PWB. Replace the PCU PWB.

**E7-65 MFP EEPROM sum check error**

Trouble content	
Detail	MFP
Cause	MFPC PWB EEPROM trouble. MFPC PWB EEPROM contact trouble.
Check & Remedy	Replace the MFPC PWB. Replace the MFPC PWB EEPROM.

**E7-80 MFP - SCU PWB communication error**

Trouble content	
Detail	MFP
Cause	SCU PWB - MFPC PWB connection trouble. SCU PWB trouble. MFPC PWB trouble.
Check & Remedy	Check connection of the SCU PWB and the MFPC PWB. Check the ground. Replace the SCU PWB. Replace the MFPC PWB.

**E7-89 Communication error between MFPC PWB CPU and energy-saving NIC controller**

Trouble content	No response can be obtained from the energy-saving NIC controller.
Detail	MFP
Cause	MFPC PWB trouble.
Check & Remedy	Replace the MFPC PWB.

**E7-90 MFP - PCU PWB communication error**

Trouble content	
Detail	MFP
Cause	PCU PWB - MFPC PWB connection trouble. PCU PWB trouble. MFPC PWB trouble.
Check & Remedy	Check connection of the PCU PWB and the MFPC PWB. Check the ground. Replace the PCU PWB. Replace the MFPC PWB.

**E7-91 FAX reception image data error**

Trouble content	An error of FAX reception image data process occurs.
Detail	MFP
Cause	Image data process abnormality HDD trouble SD card trouble or contact error Image compression data corruption MFPC PWB trouble DIMM memory trouble or contact error FAX control PWB trouble
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the HDD. Replace or check installation of the SD card. Replace the MFPC PWB. Replace or check installation of the DIMM memory. Replace the FAX control PWB.

**E7-92 Copy image data error**

Trouble content	An error of copy image data process occurs. (In Non ERDH)
Detail	MFP
Cause	Image data process abnormality HDD trouble Image compression data corruption MFPC PWB trouble DIMM memory trouble or contact error
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the HDD. Replace the MFPC PWB. Replace or check installation of the DIMM memory.

**E7-93 Copy, image send, FAX, filing, print image data process error**

Trouble content	An image data process error occurs in the following operation mode: • Copy (in ERDH) • Copy composing system function (Water mark) • When in image send • When filing documents • When displaying the preview • When printing with the GDI/PCL printer • Copy composing system function (Water mark)
Detail	MFP
Cause	Image data process abnormality HDD trouble Image compression data corruption MFPC PWB trouble DIMM memory trouble or contact error
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the HDD. Replace the MFPC PWB. Replace or check installation of the DIMM memory.

**E7-94 Image file data process error (when importing file data)**

Trouble content	File image process error (backup restore error) when importing filing data
Detail	MFP
Cause	Image data process abnormality HDD trouble Image compression data corruption MFPC PWB trouble DIMM memory trouble or contact error
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the HDD. Replace the MFPC PWB. Replace or check installation of the DIMM memory.

**E7-95 Printer PWB DIMM memory check error**

Trouble content	Printer PWB DIMM memory access trouble
Detail	MFP
Cause	Memory data corruption occurs Printer PWB trouble DIMM memory trouble or contact error
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the printer PWB. DIMM memory socket check Replace the DIMM memory.

**E7-96 MFPC PWB DIMM memory check error**

Trouble content	MFPC PWB DIMM memory access trouble
Detail	MFP
Cause	Memory data corruption occurs MFPC PWB trouble DIMM memory trouble or contact error
Check & Remedy	Use SIM60-01 to check the read/write operations of the memory. Replace the MFPC PWB. DIMM memory socket check Replace the DIMM memory.

**E7-A0 LSU LD PWB EEPROM read/write error (K)**

Trouble content	Write error in the EEPROM write sequence
Detail	PCU
Cause	LD PWB EEPROM trouble. LSU mother PWB trouble. Connector/harness trouble between the LD PWB and the LSU mother PWB. Connector/harness trouble between the PCU PWB and the LSU mother PWB.
Check & Remedy	Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check the connector/harness between the LD PWB and the LSU mother PWB, and replace if necessary. Check the connector/harness between the PCU PWB and the LSU mother PWB, and replace if necessary. Replace the LSU.

**E7-A1 LSU LD PWB EEPROM read/write error (C)**

Trouble content	Write error in the EEPROM write sequence
Detail	PCU
Cause	LD PWB EEPROM trouble. LSU mother PWB trouble. Connector/harness trouble between the LD PWB and the LSU mother PWB. Connector/harness trouble between the PCU PWB and the LSU mother PWB.
Check & Remedy	Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check the connector/harness between the LD PWB and the LSU mother PWB, and replace if necessary. Check the connector/harness between the PCU PWB and the LSU mother PWB, and replace if necessary. Replace the LSU.

**E7-A2 LSU LD PWB EEPROM read/write error (M)**

Trouble content	Write error in the EEPROM write sequence
Detail	PCU
Cause	LD PWB EEPROM trouble. LSU mother PWB trouble. Connector/harness trouble between the LD PWB and the LSU mother PWB. Connector/harness trouble between the PCU PWB and the LSU mother PWB.
Check & Remedy	Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check the connector/harness between the LD PWB and the LSU mother PWB, and replace if necessary. Check the connector/harness between the PCU PWB and the LSU mother PWB, and replace if necessary. Replace the LSU.

**E7-A3 LSU LD PWB EEPROM read/write error (Y)**

Trouble content	Write error in the EEPROM write sequence
Detail	PCU
Cause	LD PWB EEPROM trouble. LSU mother PWB trouble. Connector/harness trouble between the LD PWB and the LSU mother PWB. Connector/harness trouble between the PCU PWB and the LSU mother PWB.
Check & Remedy	Check the LSU, and replace if necessary. Check the LSU mother PWB, and replace if necessary. Check the connector/harness between the LD PWB and the LSU mother PWB, and replace if necessary. Check the connector/harness between the PCU PWB and the LSU mother PWB, and replace if necessary. Replace the LSU.

**EE-EC Automatic toner density adjustment error**

Trouble content	The sampling level in the automatic toner density adjustment is outside of $128 \pm 10$ .
Detail	PCU
Cause	Toner density sensor trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Replace the developing unit. Replace the PCU PWB.

**EE-EL Automatic toner density adjustment error (Over toner)**

Trouble content	The sampling level in the automatic toner density adjustment is 76 or less or the control voltage is 208 or above.
Detail	PCU
Cause	Toner density sensor trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Replace the developing unit. Replace the PCU PWB.



## EE-EU Automatic toner density adjustment error (Under toner)

Trouble content	The sampling level in the automatic toner density adjustment is 178 or above or the control voltage is 51 or less.
Detail	PCU
Cause	Toner density sensor trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Replace the developing unit. Replace the PCU PWB.

## F1-00 Finisher - PCU PWB communication error

Trouble content	
Detail	PCU
Cause	Connection trouble of the connector and the harness between the finisher and the PCU PWB. Finisher control PWB trouble. PCU PWB trouble.
Check & Remedy	Check the connector and the harness between the finisher and the PCU PWB. Replace the finisher control PWB. Replace the PCU PWB.

## F1-03 Finisher paper exit roller lifting operation trouble

Trouble content	
Detail	PCU
Cause	Finisher paper exit roller lift motor trouble Harness and connector connection trouble Home position sensor trouble Finisher control PWB trouble
Check & Remedy	Use SIM3-3 to check the operation of the paper exit roller lift motor. Use SIM3-2 to check the operation of the home position sensor. Replace the paper exit roller lift motor. Check connection of the connector and the harness. Replace the home position sensor. Replace the finisher control PWB.

## F1-08 Stapler shift trouble

Trouble content	
Detail	PCU
Cause	Stapler shift motor trouble. Finisher control PWB trouble. Home position sensor trouble.
Check & Remedy	Use SIM3-3 to check the operation of the stapler shift motor. Use SIM3-2 to check the operation of the home position sensor. Replace the stapler shift motor. Check connection of the connector and the harness. Replace the home position sensor. Replace the finisher control PWB.

## F1-10 Staple operation trouble

Trouble content	
Detail	PCU
Cause	Staple motor trouble. Finisher control PWB trouble. Home position sensor trouble.
Check & Remedy	Use SIM3-3 to check the operation of the staple motor. Use SIM3-2 to check the operation of the home position sensor. Replace the staple motor. Check connection of the connector and the harness. Replace the home position sensor. Replace the finisher control PWB.

## F1-11 Finisher grip motor trouble

Trouble content	
Detail	PCU
Cause	Paper exit operation trouble caused by the gripper. Gripper motor lock or trouble. Gripper home position sensor trouble. Finisher control PWB trouble. Connection trouble of the harness and the connector of the finisher control PWB and the gripper motor.
Check & Remedy	Use SIM3-3 to check the operation of the gripper motor. Check the connection of the harness and the connector of the finisher control PWB and the gripper motor, and replace if necessary. Check the gripper motor, and replace if necessary. Check the gripper home position sensor, and replace if necessary. Check the finisher control PWB, and replace if necessary.

## F1-15 Finisher paper exit tray lift operation trouble

Trouble content	Lift motor trouble.
Detail	PCU
Cause	Paper exit tray lift motor trouble. Finisher control PWB trouble. Home position sensor trouble.
Check & Remedy	Use SIM3-3 to check the operation of the paper exit tray lift motor. Use SIM3-2 to check the operation of the home position sensor. Replace the finisher control PWB. Replace the paper exit tray lift motor. Replace the home position sensor.

## F1-19 Finisher alignment operation trouble F

Trouble content	
Detail	PCU
Cause	Finisher paper alignment motor lock. Motor speed abnormality. Over-current to the motor. Finisher control PWB trouble. Home position sensor trouble.
Check & Remedy	Use SIM3-3 to check the operation of the paper alignment motor F. Use SIM3-2 to check the operation of the home position sensor. Replace the finisher control PWB. Replace the paper alignment motor F. Replace the home position sensor.

## F1-20 Finisher alignment operation trouble R

Trouble content	
Detail	PCU
Cause	Finisher paper alignment motor lock. Motor speed abnormality. Over-current to the motor. Finisher control PWB trouble. Home position sensor trouble.
Check & Remedy	Use SIM3-3 to check the operation of the paper alignment motor R. Use SIM3-2 to check the operation of the home position sensor. Replace the finisher control PWB. Replace the paper alignment motor R. Replace the home position sensor.

## F1-21 Finisher fan trouble

Trouble content	
Detail	PCU
Cause	Motor lock, motor harness short-circuit/open, finisher control PWB trouble, connection harness/connector trouble. Fan motor lock, short-circuit, open circuit. Finisher fan trouble. Finisher control PWB trouble. Connector/harness trouble
Check & Remedy	Use SIM3-3 to check the operation of the fan. Check the finisher fan, and replace if necessary. Check the finisher control PWB, and replace if necessary. Check the connector/harness, and replace if necessary.

## F1-31 Finisher saddle motor trouble (Saddle stitch finisher)

Trouble content	
Detail	PCU
Cause	Saddle paper folding motor trouble. Saddle paper folding mechanism trouble. Finisher control PWB trouble. Folding plate home position sensor trouble. Saddle paper folding motor rotation sensor trouble. Harness/connector connection trouble. PCU PWB trouble.
Check & Remedy	Use SIM3-3 to check the operation of the saddle motor. Check the saddle paper folding mechanism. Check the finisher control PWB, and replace if necessary. Check the folding plate home position sensor, and replace if necessary. Check the saddle paper folding motor rotation sensor, and replace if necessary. Check connection of the harness/connector, and replace if necessary. Check the PCU PWB, and replace if necessary.

## F1-32 Communication error between the finisher and the punch unit (Saddle stitch finisher)

Trouble content	
Detail	PCU
Cause	Connector/harness trouble between the finisher and the punch unit. Finisher control PWB trouble. PCU PWB trouble. Malfunction due to noises.
Check & Remedy	Check the connector/harness between the finisher and the punch unit, and replace if necessary. Check the finisher control PWB, and replace if necessary. Check the PCU PWB, and replace if necessary.

## F1-33 Punch unit shift operation trouble

Trouble content	
Detail	PCU
Cause	Punch shift motor trouble. Finisher control PWB trouble. Home position sensor trouble. Harness and connector connection trouble.
Check & Remedy	Use SIM3-3 to check the operation of the punch shifting. Use SIM3-2 to check the operation of the home position sensor. Replace the punch shift motor. Replace the finisher control PWB. Replace the home position sensor. Check connection of the connectors and the harness.

## F1-34 Punch operation trouble

Trouble content	
Detail	PCU
Cause	Punch motor trouble. Finisher control PWB trouble. Home position sensor trouble. Harness and connector connection trouble.
Check & Remedy	Use SIM3-2 to check the operation of the home position sensor. Use SIM3-3 to check the operation of the punch. Replace the punch motor. Replace the finisher control PWB. Replace the home position sensor. Check connection of the connectors and the harness.

## F1-36 Punch paper edge detection error

Trouble content	
Detail	PCU
Cause	Punch paper edge sensor trouble. Harness disconnection. Finisher control PWB trouble. Punch control PWB trouble.
Check & Remedy	Use SIM3-2 to check the operation of the sensor. Replace the punch paper edge sensor. Replace the finisher control PWB. Replace the punch control PWB.

**F1-37 Finisher data backup RAM error**

Trouble content	
Detail	PCU
Cause	Finisher control PWB trouble. Malfunction due to noises
Check & Remedy	Replace the finisher control PWB. Readjust the finisher. (Use SIM3-10, Finisher control PWB DIP SW adjustment.)

**F1-38 Punch data backup RAM error**

Trouble content	
Detail	PCU
Cause	Punch control PWB trouble. Malfunction due to noises
Check & Remedy	Replace the punch control PWB. Set the punch unit specifications, and adjust the sensor. (Punch unit control PWB DIP SW adjustment.)

**F1-39 Punch paper dust sensor error**

Trouble content	
Detail	PCU
Cause	Punch dust sensor trouble. Harness and connector connection trouble. Finisher control PWB trouble. Punch unit control PWB trouble.
Check & Remedy	Use SIM3-2 to check the operation of the sensor. Check connection of the connectors and the harness. Replace the punch dust sensor. Replace the finisher control PWB. Replace the punch unit control PWB.

**F1-41 Saddle paper positioning operation trouble**

Trouble content	Abnormality in the folding positioning guide motor in the saddle section.
Detail	PCU
Cause	Saddle paper positioning guide drive motor trouble. Finisher control PWB trouble. Home position sensor trouble. Harness and connector connection trouble.
Check & Remedy	Use SIM3-3 to check the operation of the saddle paper positioning motor. Check connection from the control PWB to the motor. Turn OFF/ON the power. Replace the control PWB. Replace the sensor.

**F1-43 Saddle alignment operation trouble**

Trouble content	
Detail	PCU
Cause	Saddle alignment motor trouble. Finisher control PWB trouble. Home position sensor trouble. Harness and connector connection trouble.
Check & Remedy	Use SIM3-3 to check the operation of the Saddle alignment motor (FSPAM). Check connection from the control PWB to the motor. Turn OFF/ON the power. Replace the control PWB. Replace the sensor.

**F1-45 Saddle staple trouble**

Trouble content	Abnormality of the staple unit drive motor in the saddle section.
Detail	PCU
Cause	Saddle staple motor trouble. Finisher control PWB trouble. Home position sensor trouble. Harness and connector connection trouble.
Check & Remedy	Use SIM3-3 to check the operation of the saddle staple motor. Check connection from the control PWB to the motor. Turn OFF/ON the power. Replace the control PWB. Replace the sensor.

**F1-47 Saddle paper transport motor trouble**

Trouble content	Abnormality in the drive roller oscillation motor in the finisher saddle transport section.
Detail	PCU
Cause	Saddle paper transport motor trouble. Finisher control PWB trouble. Harness and connector connection trouble. Fuse blown (24V line).
Check & Remedy	Use SIM3-3 to check the operation of the saddle paper transport motor. Check connection from the control PWB to the motor. Replace the control PWB. Replace the sensor.

**F1-50 Main unit - Finisher combination error**

Trouble content	
Detail	PCU
Cause	The finisher which is not supported by the main unit model is installed. Finisher control PWB trouble.
Check & Remedy	Install a proper finisher. Replace the finisher control PWB.

**F2-22 Discharge lamp trouble (K)**

Trouble content	The lamp is kept open for 1 sec from turning on the discharge lamp.
Detail	PCU
Cause	Contact trouble between the discharge lamp PWB (K) and the PCU PWB. Discharge lamp PWB (K) trouble. PCU PWB trouble.
Check & Remedy	Replace the discharge lamp PWB (K). Check the harness and the connector. Replace the PCU PWB.

**F2-23 Discharge lamp trouble (C)**

Trouble content	The lamp is kept open for 1 sec from turning on the discharge lamp.
Detail	PCU
Cause	Contact trouble between the discharge lamp PWB (C) and the PCU PWB. Discharge lamp PWB (C) trouble. PCU PWB trouble.
Check & Remedy	Replace the discharge lamp PWB (C). Check the harness and the connector. Replace the PCU PWB.

**F2-24 Discharge lamp trouble (M)**

Trouble content	The lamp is kept open for 1 sec from turning on the discharge lamp.
Detail	PCU
Cause	Contact trouble between the discharge lamp PWB (M) and the PCU PWB. Discharge lamp PWB (M) trouble. PCU PWB trouble.
Check & Remedy	Replace the discharge lamp PWB (M). Check the harness and the connector. Replace the PCU PWB.

**F2-25 Discharge lamp trouble (Y)**

Trouble content	The lamp is kept open for 1 sec from turning on the discharge lamp.
Detail	PCU
Cause	Contact trouble between the discharge lamp PWB (Y) and the PCU PWB. Discharge lamp PWB (Y) trouble. PCU PWB trouble.
Check & Remedy	Replace the discharge lamp PWB (Y). Check the harness and the connector. Replace the PCU PWB.

**F2-39 Process thermistor trouble**

Trouble content	
Detail	PCU
Cause	Process thermistor trouble. Process thermistor harness connection trouble. PCU PWB trouble.
Check & Remedy	Replace the process thermistor. Check connection of the process thermistor harness and the connector. Replace the PCU PWB.

**F2-40 Toner density sensor trouble (K)**

Trouble content	
Detail	PCU
Cause	Toner density sensor output abnormality. Sensor connector and harness connection trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Check connection of the sensor connector and the harness. Replace the developing unit. Replace the PCU PWB.

**F2-41 Toner density sensor trouble (C)**

Trouble content	
Detail	PCU
Cause	Toner density sensor output abnormality. Sensor connector and harness connection trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Check connection of the sensor connector and the harness. Replace the developing unit. Replace the PCU PWB.

**F2-42 Toner density sensor trouble (M)**

Trouble content	
Detail	PCU
Cause	Toner density sensor output abnormality. Sensor connector and harness connection trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Check connection of the sensor connector and the harness. Replace the developing unit. Replace the PCU PWB.

**F2-43 Toner density sensor trouble (Y)**

Trouble content	
Detail	PCU
Cause	Toner density sensor output abnormality. Sensor connector and harness connection trouble. Developing unit trouble. PCU PWB trouble.
Check & Remedy	Replace the toner density sensor. Check connection of the sensor connector and the harness. Replace the developing unit. Replace the PCU PWB.

**F2-45 Color image density sensor trouble**

Trouble content	
Detail	PCU
Cause	Color image density sensor sensitivity adjustment trouble. Color image density sensor trouble. Sensor harness and connector connection trouble. Image density sensor dirt. Calibration plate dirt. Transfer unit lift operation trouble PCU PWB trouble.
Check & Remedy	Replace the color image density sensor. Check connection of the sensor harness and the connector. Clean the image density sensor. Replace the calibration plate. Repair the transfer unit lift mechanism. Replace the PCU PWB. Use SIM44-13 to perform the sensitivity adjustment of the process control sensor.

**F2-49 LSU thermistor trouble**

Trouble content	
Detail	PCU
Cause	The LSU temperature is outside of -28°C - 78°C. LSU thermistor trouble. LSU thermistor harness and connector connection trouble PCU PWB trouble. LSU control PWB trouble.
Check & Remedy	Replace the PCU PWB. Replace the LSU control PWB. Replace the LSU.

**F2-50 K drum phase sensor trouble**

Trouble content	
Detail	PCU
Cause	Drum phase sensor trouble. Drum phase sensor harness and connector connection trouble Drum drive section trouble. PCU PWB trouble.
Check & Remedy	Use SIM30-1 to check the operation of "DHPD_K". Replace the drum phase sensor. Check connection of the drum phase sensor harness and the connector. Repair the drum drive section. Replace the PCU PWB.

**F2-51 CL drum phase sensor trouble**

Trouble content	
Detail	PCU
Cause	Drum phase sensor trouble. Drum phase sensor harness and connector connection trouble Drum drive section trouble. PCU PWB trouble.
Check & Remedy	Use SIM30-1 to check the operation of "DHPD_CL". Replace the drum phase sensor. Check connection of the drum phase sensor harness and the connector. Repair the drum drive section. Replace the PCU PWB.

**F2-58 Temperature/humidity sensor trouble (HUD\_M/TH\_M)**

Trouble content	
Detail	PCU
Cause	Temperature/humidity sensor trouble. Process humidity sensor harness and connector connection trouble PCU PWB trouble.
Check & Remedy	Replace the temperature/humidity sensor. Check connection of the temperature/humidity sensor harness and the connector. Replace the PCU PWB.

**F2-64 Toner supply operation trouble (K)**

Trouble content	
Detail	PCU
Cause	Toner motor trouble. Toner density sensor trouble. Connector/harness trouble. PCU PWB trouble. Toner cartridge trouble. Developing unit trouble. Toner transport pipe section trouble
Check & Remedy	Replace the toner motor. Replace the toner density sensor. Connector and harness check. Replace the PCU PWB. Replace the toner cartridge. Replace the developing unit. Check the toner transport pipe section.

**F2-65 Toner supply operation trouble (C)**

Trouble content	
Detail	PCU
Cause	Toner motor trouble. Toner density sensor trouble. Connector/harness trouble. PCU PWB trouble. Toner cartridge trouble. Developing unit trouble. Toner transport pipe section trouble
Check & Remedy	Replace the toner motor. Replace the toner density sensor. Connector and harness check. Replace the PCU PWB. Replace the toner cartridge. Replace the developing unit. Check the toner transport pipe section.

**F2-66 Toner supply operation trouble (M)**

Trouble content	
Detail	PCU
Cause	Toner motor trouble. Toner density sensor trouble. Connector/harness trouble. PCU PWB trouble. Toner cartridge trouble. Developing unit trouble. Toner transport pipe section trouble
Check & Remedy	Replace the toner motor. Replace the toner density sensor. Connector and harness check. Replace the PCU PWB. Replace the toner cartridge. Replace the developing unit. Check the toner transport pipe section.

**F2-67 Toner supply operation trouble (Y)**

Trouble content	
Detail	PCU
Cause	Toner motor trouble. Toner density sensor trouble. Connector/harness trouble. PCU PWB trouble. Toner cartridge trouble. Developing unit trouble. Toner transport pipe section trouble
Check & Remedy	Replace the toner motor. Replace the toner density sensor. Connector and harness check. Replace the PCU PWB. Replace the toner cartridge. Replace the developing unit. Check the toner transport pipe section.

**F2-70 Improper toner cartridge detection (K)**

Trouble content	
Detail	PCU
Cause	An improper toner cartridge is inserted. (The main unit detects a toner cartridge of a different specification.) Toner cartridge trouble. PCU PWB trouble.
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB.

**F2-71 Improper toner cartridge detection (C)**

Trouble content	
Detail	PCU
Cause	An improper toner cartridge is inserted. (The main unit detects a toner cartridge of a different specification.) Toner cartridge trouble. PCU PWB trouble.
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB.

**F2-72 Improper toner cartridge detection (M)**

Trouble content	
Detail	PCU
Cause	An improper toner cartridge is inserted. (The main unit detects a toner cartridge of a different specification.) Toner cartridge trouble. PCU PWB trouble.
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB.

**F2-73 Improper toner cartridge detection (Y)**

Trouble content	
Detail	PCU
Cause	An improper toner cartridge is inserted. (The main unit detects a toner cartridge of a different specification.) Toner cartridge trouble. PCU PWB trouble.
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB.

**F2-74 Toner cartridge CRUM error (K)**

Trouble content	
Detail	PCU
Cause	Toner cartridge (CRUM) trouble. PCU PWB trouble. Connector and harness trouble between PCU PWB and toner cartridge
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB. Check the connector and the harness between the PCU PWB and the toner cartridge.

**F2-75 Toner cartridge CRUM error (C)**

Trouble content	
Detail	PCU
Cause	Toner cartridge (CRUM) trouble. PCU PWB trouble. Connector and harness trouble between PCU PWB and toner cartridge
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB. Check the connector and the harness between the PCU PWB and the toner cartridge.

**F2-76 Toner cartridge CRUM error (M)**

Trouble content	
Detail	PCU
Cause	Toner cartridge (CRUM) trouble. PCU PWB trouble. Connector and harness trouble between PCU PWB and toner cartridge
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB. Check the connector and the harness between the PCU PWB and the toner cartridge.

**F2-77 Toner cartridge CRUM error (Y)**

Trouble content	
Detail	PCU
Cause	Toner cartridge (CRUM) trouble. PCU PWB trouble. Connector and harness trouble between PCU PWB and toner cartridge
Check & Remedy	Replace the toner cartridge. Replace the PCU PWB. Check the connector and the harness between the PCU PWB and the toner cartridge.

**F2-78 Registration/BK image density sensor trouble (Transfer belt substrate reflection rate abnormality)**

Trouble content	
Detail	PCU
Cause	Image density (registration) sensor trouble (Sensor sensitivity adjustment trouble). PCU PWB trouble. Image density (resist) sensor connector and harness connection trouble Image density (registration) sensor dirt. Transfer belt dirt, scratch.
Check & Remedy	Replace the image density (registration) sensor. Replace the PCU PWB. Check connection of the connector and the harness of the image density (resist) sensor. Clean the image density (registration) sensor. Clean or replace the transfer belt.

**F2-91 High density process control high voltage error (K)**

Trouble content	For the production process (Not occur in the market.)
Detail	PCU
Cause	—
Check & Remedy	—

**F2-92 High density process control high voltage error (C)**

Trouble content	For the production process (Not occur in the market.)
Detail	PCU
Cause	—
Check & Remedy	—

## F2-93 High density process control high voltage error (M)

Trouble content	For the production process (Not occur in the market.)
Detail	PCU
Cause	—
Check & Remedy	—

## F2-94 High density process control high voltage error (Y)

Trouble content	For the production process (Not occur in the market.)
Detail	PCU
Cause	—
Check & Remedy	—

## F3-12 Paper feed tray 1 lift operation trouble

Trouble content	
Detail	PCU
Cause	LUD1 is not turned ON within the specified time. CLUD1 sensor trouble. Paper feed tray 1 lift unit trouble. PCU PWB trouble. Sensor harness and connector connection trouble
Check & Remedy	Check connection of the harness and the connector of LUD1. Replace the lift-up unit. Replace the PCU PWB.

## F3-22 Paper feed tray 2 lift operation trouble

Trouble content	LUD2 does not turn ON within the specified time.
Detail	PCU
Cause	LUD2 does not turn ON within the specified time. CLUD2 sensor trouble. Paper feed tray 2 lift unit trouble. PCU PWB trouble. Sensor harness and connector connection trouble
Check & Remedy	Check the harness and the connector of LUD2. Replace the lift-up unit. Replace the PCU PWB.

## F6-00 MFPC PWB - FAX communication trouble

Trouble content	MFP - FAX communication establishment error / Framing / Parity / Protocol error				
Section	MFP				
Case 1	<table> <tr> <td>Cause</td><td>FAX control PWB trouble.</td></tr> <tr> <td>Check and Remedy</td><td>Replace the FAX control PWB.</td></tr> </table>	Cause	FAX control PWB trouble.	Check and Remedy	Replace the FAX control PWB.
Cause	FAX control PWB trouble.				
Check and Remedy	Replace the FAX control PWB.				
Case 2	<table> <tr> <td>Cause</td><td>FAX control PWB - MFPC PWB connector and harness trouble</td></tr> <tr> <td>Check and Remedy</td><td>Check the connector and the harness between the FAX control PWB and the MFPC PWB.</td></tr> </table>	Cause	FAX control PWB - MFPC PWB connector and harness trouble	Check and Remedy	Check the connector and the harness between the FAX control PWB and the MFPC PWB.
Cause	FAX control PWB - MFPC PWB connector and harness trouble				
Check and Remedy	Check the connector and the harness between the FAX control PWB and the MFPC PWB.				
Case 3	<table> <tr> <td>Cause</td><td>FAX control PWB - Mother board connector and harness trouble</td></tr> <tr> <td>Check and Remedy</td><td>Check the connector and the harness between the FAX control PWB and the mother board.</td></tr> </table>	Cause	FAX control PWB - Mother board connector and harness trouble	Check and Remedy	Check the connector and the harness between the FAX control PWB and the mother board.
Cause	FAX control PWB - Mother board connector and harness trouble				
Check and Remedy	Check the connector and the harness between the FAX control PWB and the mother board.				
Case 4	<table> <tr> <td>Cause</td><td>FAX control PWB ROM trouble / ROM pin breakage</td></tr> <tr> <td>Check and Remedy</td><td>Check the ROM of the FAX control PWB.</td></tr> </table>	Cause	FAX control PWB ROM trouble / ROM pin breakage	Check and Remedy	Check the ROM of the FAX control PWB.
Cause	FAX control PWB ROM trouble / ROM pin breakage				
Check and Remedy	Check the ROM of the FAX control PWB.				

## F6-01 FAX control PWB EEPROM read/write error

Trouble content	FAX control PWB EEPROM access error (Read and write)				
Section	FAX				
Case 1	<table> <tr> <td>Cause</td><td>FAX control PWB EEPROM trouble</td></tr> <tr> <td>Check and Remedy</td><td>Check that no trouble occurs after replacement of EEPROM. Execute the memory check of SIM66-3 to insure that EEPROM can be accessed.</td></tr> </table>	Cause	FAX control PWB EEPROM trouble	Check and Remedy	Check that no trouble occurs after replacement of EEPROM. Execute the memory check of SIM66-3 to insure that EEPROM can be accessed.
Cause	FAX control PWB EEPROM trouble				
Check and Remedy	Check that no trouble occurs after replacement of EEPROM. Execute the memory check of SIM66-3 to insure that EEPROM can be accessed.				
Case 2	<table> <tr> <td>Cause</td><td>FAX control PWB EEPROM access circuit trouble</td></tr> <tr> <td>Check and Remedy</td><td>Replace the FAX control PWB.</td></tr> </table>	Cause	FAX control PWB EEPROM access circuit trouble	Check and Remedy	Replace the FAX control PWB.
Cause	FAX control PWB EEPROM access circuit trouble				
Check and Remedy	Replace the FAX control PWB.				

## F6-04 FAX MODEM operation trouble

Trouble content	FAX control PWB MODEM chip operation trouble				
Section	FAX				
Case 1	<table> <tr> <td>Cause</td><td>FAX MODEM chip operation trouble.</td></tr> <tr> <td>Check and remedy</td><td>Replace the FAX control PWB.</td></tr> </table>	Cause	FAX MODEM chip operation trouble.	Check and remedy	Replace the FAX control PWB.
Cause	FAX MODEM chip operation trouble.				
Check and remedy	Replace the FAX control PWB.				
Case 2	<table> <tr> <td>Cause</td><td>The FAX MODEM chip cannot be accessed.</td></tr> <tr> <td>Check and Remedy</td><td>Replace the FAX control PWB.</td></tr> </table>	Cause	The FAX MODEM chip cannot be accessed.	Check and Remedy	Replace the FAX control PWB.
Cause	The FAX MODEM chip cannot be accessed.				
Check and Remedy	Replace the FAX control PWB.				

## F6-21 Improper combination of TEL/LIU PWB and FAX soft switch

Trouble content	Incompatibility between the TEL/LIU PWB and the FAX control PWB information (soft switch)				
Section	MFP				
Case 1	<table> <tr> <td>Cause</td><td>The destination of the TEL/LIU PWB installed is improper.</td></tr> <tr> <td>Check and Remedy</td><td>Check the destination of the TEL/LIU PWB.</td></tr> </table>	Cause	The destination of the TEL/LIU PWB installed is improper.	Check and Remedy	Check the destination of the TEL/LIU PWB.
Cause	The destination of the TEL/LIU PWB installed is improper.				
Check and Remedy	Check the destination of the TEL/LIU PWB.				
Case 2	<table> <tr> <td>Cause</td><td>TEL/LIU PWB trouble.</td></tr> <tr> <td>Check and Remedy</td><td>Replace the TEL/LIU PWB.</td></tr> </table>	Cause	TEL/LIU PWB trouble.	Check and Remedy	Replace the TEL/LIU PWB.
Cause	TEL/LIU PWB trouble.				
Check and Remedy	Replace the TEL/LIU PWB.				

## F6-30 FAX 1-chip microprocessor access error (FAX detection)

Trouble content	FAX 1-chip microprocessor access error (Read and write)				
Section	MFP				
Case 1	<table> <tr> <td>Cause</td><td>Program writing trouble to the 1-chip microprocessor, or no program data written.</td></tr> <tr> <td>Check and Remedy</td><td>Use SIM66-42 to rewrite the 1-chip microprocessor program.</td></tr> </table>	Cause	Program writing trouble to the 1-chip microprocessor, or no program data written.	Check and Remedy	Use SIM66-42 to rewrite the 1-chip microprocessor program.
Cause	Program writing trouble to the 1-chip microprocessor, or no program data written.				
Check and Remedy	Use SIM66-42 to rewrite the 1-chip microprocessor program.				
Case 2	<table> <tr> <td>Cause</td><td>FAX 1-chip microprocessor circuit trouble.</td></tr> <tr> <td>Check and Remedy</td><td>Replace the FAX control PWB.</td></tr> </table>	Cause	FAX 1-chip microprocessor circuit trouble.	Check and Remedy	Replace the FAX control PWB.
Cause	FAX 1-chip microprocessor circuit trouble.				
Check and Remedy	Replace the FAX control PWB.				

## F6-97 Incompatibility between FAX control PWB and the main machine

Trouble content		Incompatibility between FAX control PWB and the main machine
Section		MFP
Case 1	Cause	The FAX control PWB installed is improper. FAX control PWB trouble.
	Check and Remedy	Install a proper FAX control PWB. Replace the FAX control PWB.

## F6-98 Incompatibility between the FAX control PWB destination and the main machine destination

Trouble content		Incompatibility between the FAX control PWB destination and the main machine destination
Section		MFP
Case 1	Cause	Incompatibility between the destination information written into the FAX control PWB EEPROM and that in the main machine (set with SIM26-6)
	Check and Remedy	1) Check the destination of the FAX control PWB. 2) Check the destination of the machine. (SIM26-6)

## F9-91 Communication error between MFP and the printer section when booting

Trouble content		Booting of the printer section cannot be recognized when booting.
Detail		MFP
Cause		MFPC (section) PWB trouble. Printer (section) PWB trouble. Printer flash ROM trouble. MFPC (section) PWB - printer (section) PWB connection trouble.
Check & Remedy		Replace the MFPC (section) PWB. Replace the printer (section) PWB. Replace the printer flash ROM. Check connection between the MFPC (section) PWB and the printer (section) PWB.

## F9-92 Printer (section) PWB hardware error

Trouble content		
Detail		Printer (section) PWB
Cause		Printer PWB trouble Font ROM contact trouble or error DIMM memory contact trouble or error
Check & Remedy		Replace the printer PWB. Check the font ROM socket. Check the DIMM memory socket. Check the font ROM. Replace the DIMM memory.

## H2-00 Thermistor open trouble (TH\_UM\_AD2)

Trouble content		
Detail		PCU
Cause		Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble Fusing section connector connection trouble Fusing unit not installed
Check & Remedy		Use SIM44-14 to check the state of the thermistor. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Check the connector in the fusing section.

## H2-01 Thermistor open trouble (TH\_LM)

Trouble content		
Detail		PCU
Cause		Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble Fusing section connector connection trouble Fusing unit not installed
Check & Remedy		Use SIM44-14 to check the state of the thermistor. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Check the connector in the fusing section.

## H2-02 Thermistor open trouble (TH\_US)

Trouble content		
Detail		PCU
Cause		Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble Fusing section connector connection trouble Fusing unit not installed
Check & Remedy		Use SIM44-14 to check the state of the thermistor. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Check the connector in the fusing section.

## H2-03 Thermistor open trouble (TH\_UM\_AD1)

Trouble content		
Detail		PCU
Cause		Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble Fusing section connector connection trouble Fusing unit not installed
Check & Remedy		Use SIM44-14 to check the state of the thermistor. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Check the connector in the fusing section.



### H3-00 Fusing section high temperature trouble (TH\_UM)

Trouble content	
Detail	PCU
Cause	The fusing temperature exceeds the specified level. Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble HL control PWB trouble
Check & Remedy	Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Use SIM14 to cancel the trouble. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Replace the HL control PWB.

### H3-01 Fusing section high temperature trouble (TH\_LM)

Trouble content	
Detail	PCU
Cause	The fusing temperature exceeds the specified level. Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble HL control PWB trouble
Check & Remedy	Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Use SIM14 to cancel the trouble. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Replace the HL control PWB.

### H3-02 Fusing section high temperature trouble (TH\_US)

Trouble content	
Detail	PCU
Cause	The fusing temperature exceeds the specified level. Thermistor trouble PCU PWB trouble Thermistor connector and harness connection trouble HL control PWB trouble
Check & Remedy	Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Use SIM14 to cancel the trouble. Replace the thermistor. Replace the PCU PWB. Check connection of the thermistor connector and the harness. Replace the HL control PWB.

### H4-00 Fusing section low temperature trouble (TH\_UM\_AD2)

Trouble content	The fusing temperature does not reach the specified level within the specified time from turning ON the power relay.
Detail	PCU
Cause	Thermistor trouble. Heater lamp trouble. PCU PWB trouble. Thermostat trouble. Connector, harness connection trouble. HL control PWB trouble. Power unit trouble.
Check & Remedy	Use SIM14 to cancel the trouble. Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Replace the thermistor. Replace the heater lamp. Replace the PCU PWB. Replace the thermostat. Check connection of the connector and the harness. Replace the HL control PWB. Replace the power unit.

### H4-01 Fusing section low temperature trouble (TH\_LM)

Trouble content	The fusing temperature does not reach the specified level within the specified time from turning ON the power relay.
Detail	PCU
Cause	Thermistor trouble. Heater lamp trouble. PCU PWB trouble. Thermostat trouble. Connector, harness connection trouble. HL control PWB trouble. Power unit trouble.
Check & Remedy	Use SIM14 to cancel the trouble. Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Replace the thermistor. Replace the heater lamp. Replace the PCU PWB. Replace the thermostat. Check connection of the connector and the harness. Replace the HL control PWB. Replace the power unit.

#### H4-02 Fusing section low temperature trouble (TH\_US)

Trouble content	The fusing temperature does not reach the specified level within the specified time from turning ON the power relay.
Detail	PCU
Cause	Thermistor trouble. Heater lamp trouble. PCU PWB trouble. Thermostat trouble. Connector, harness connection trouble. HL control PWB trouble. Power unit trouble.
Check & Remedy	Use SIM14 to cancel the trouble. Use SIM44-14 to check the state of the thermistor. Use SIM5-2 to check the flashing operation of the heater lamp. Replace the thermistor. Replace the heater lamp. Replace the PCU PWB. Replace the thermostat. Check connection of the connector and the harness. Replace the HL control PWB. Replace the power unit.

#### H5-01 5 times continuous POD1 not-reach jam

Trouble content	
Detail	PCU
Cause	A fusing jam is not canceled completely. (A jam paper remains.) POD1 sensor trouble Fusing unit installation trouble POD1 sensor connector and harness connection trouble PCU PWB trouble Fusing unit, drive section trouble
Check & Remedy	Replace the POD1 sensor. Check installation of the fusing unit. Replace the fusing unit. Check or repair the fusing drive section. Check connection of the POD1 sensor connector and the harness. Replace the PCU PWB. Use SIM14 to cancel the trouble.

#### H7-10 Recovery error from low fuser temp. (TH\_UM\_AD2)

Trouble content	The fusing temperature does not reach the specified level within the specified time from stopping a job due to fall in the fusing temperature.
Detail	PCU
Cause	Thermistor trouble. Heater lamp trouble. PCU PWB trouble. Thermostat trouble. Connector, harness connection trouble. HL control PWB trouble. Power unit trouble.
Check & Remedy	Replace the thermistor. Replace the heater lamp. Replace the PCU PWB. Replace the thermostat. Check connection of the connector and the harness. Replace the HL control PWB. Replace the power unit. Use SIM5-2 to check the flashing operation of the heater lamp.

#### H7-11 Recovery error from low fuser temp. (TH\_LM)

Trouble content	The fusing temperature does not reach the specified level within the specified time from stopping a job due to fall in the fusing temperature.
Detail	PCU
Cause	Thermistor trouble. Heater lamp trouble. PCU PWB trouble. Thermostat trouble. Connector, harness connection trouble. HL control PWB trouble. Power unit trouble.
Check & Remedy	Replace the thermistor. Replace the heater lamp. Replace the PCU PWB. Replace the thermostat. Check connection of the connector and the harness. Replace the HL control PWB. Replace the power unit. Use SIM5-2 to check the flashing operation of the heater lamp.

#### L1-00 Scanner feed trouble

Trouble content	Scanner feed is not completed within the specified time.
Detail	SCU
Cause	Scanner unit trouble. SCU PWB trouble. Scanner control PWB trouble. Harness and connector connection trouble. Scanner home position sensor trouble. Scanner motor trouble.
Check & Remedy	Use SIM1-1 to check the scan operation. Replace the scanner unit. Replace the SCU PWB. Check connection of the connectors and the harness. Replace the scanner home position sensor. Replace the scanner motor.

#### L3-00 Scanner return trouble

Trouble content	Scanner return is not completed within the specified time.
Detail	SCU
Cause	Scanner unit trouble SCU PWB trouble Scanner control PWB trouble Harness and connector connection trouble Scanner home position sensor trouble Scanner motor trouble
Check & Remedy	Use SIM1-1 to check the scan operation. Replace the scanner unit. Replace the SCU PWB. Check connection of the connectors and the harness. Replace the scanner home position sensor. Replace the scanner motor.

**L4-02 Paper feed motor trouble**

Trouble content	A lock signal is not detected within the specified time in ON operation of the paper feed motor after warming-up or canceling a jam.
Detail	PCU
Cause	Paper feed motor trouble Paper feed motor harness and connector connection trouble PCU PWB trouble
Check & Remedy	Use SIM6-1 to check the operation of the paper feed motor. Replace the paper feed motor. Check connection of the paper feed motor harness and the connector. Replace the PCU PWB.

**L4-03 Fusing motor trouble**

Trouble content	The motor lock signal is detected during rotation of the fusing motor.
Detail	PCU
Cause	Fusing motor trouble Fusing motor harness and connector connection trouble PCU PWB trouble
Check & Remedy	Use SIM6-1 to check the operation of the fusing motor. Replace the Fusing motor. Check connection of the fusing motor harness and the connection. Replace the PCU PWB.

**L4-04 Developing motor trouble (BLACK)**

Trouble content	The motor lock signal is detected during rotation of the developing motor.
Detail	PCU
Cause	Developing motor trouble Developing motor harness and connector connection trouble PCU PWB trouble Developing unit trouble
Check & Remedy	Use SIM25-1 to check the operation of the developing motor. Replace the developing motor. Check connection of the developing motor harness and the connection. Replace the PCU PWB. Replace the developing motor. Replace the developing unit.

**L4-05 Developing motor trouble (COLOR)**

Trouble content	The motor lock signal is detected during rotation of the developing motor.
Detail	PCU
Cause	Developing motor trouble Developing motor harness and connector connection trouble PCU PWB trouble Developing unit trouble
Check & Remedy	Use SIM25-1 to check the operation of the developing motor. Replace the developing motor. Check connection of the developing motor harness and the connection. Replace the PCU PWB. Replace the developing motor. Replace the developing unit.

**L4-06 Transfer unit lift trouble**

Trouble content	A change in the primary transfer position sensor cannot be detected within the specified time in lifting operation of the primary transfer unit.
Detail	PCU
Cause	Transfer unit position sensor trouble Dirt on the transfer unit position sensor. PCU PWB trouble Connection trouble of the connector and the harness. Transfer unit lift mechanism trouble Primary transfer belt unit is not installed.
Check & Remedy	Use SIM6-3 to check the separating operation of the transfer unit. Install the primary transfer belt unit. Replace the transfer unit position sensor. Clean the transfer unit position sensor. Replace the PCU PWB. Check connection of the connector and the harness. Repair the transfer unit lift mechanism.

**L4-07 Transfer belt motor trouble**

Trouble content	
Detail	PCU
Cause	The motor lock signal is detected during rotation of the transfer belt motor. Transfer belt motor trouble Transfer belt motor harness and connector connection trouble PCU PWB trouble
Check & Remedy	Use SIM25-1 to check the operation of the transfer belt motor. Check the transfer belt motor, and replace if necessary. Check connection of the harness and connectors of the transfer belt motor, and replace if necessary. Check the PCU PWB, and replace if necessary.

**L4-11 Shift motor trouble**

Trouble content	No change in the shifter home position sensor signal is detected in the operation of the shifter initializing.
Detail	PCU
Cause	Shift motor trouble. PCU PWB trouble. Connection trouble of the connector and the harness. Shifter home position sensor trouble.
Check & Remedy	Use SIM6-1 to check the shift operation. Use SIM30-1 to check the operation of the shifter home position sensor. Replace the shift motor. Replace the PCU PWB. Check connection of the connector and the harness. Replace the shifter home position sensor.

**L4-12 Secondary transfer separation trouble**

Trouble content	A change in the separation sensor status cannot be detected within the specified time in separation operation of the secondary transfer.
Detail	PCU
Cause	Secondary transfer separation mechanism trouble. Secondary transfer separation clutch trouble. Secondary transfer separation sensor trouble. Connection trouble of the connector and the harness. PCU PWB trouble.
Check & Remedy	Check or repair the secondary transfer separation mechanism. Replace the secondary transfer separation clutch. Replace the secondary transfer separation sensor. Replace the PCU PWB. Check connection of the connector and the harness.

**L4-16 Fusing pressure release trouble**

Trouble content	A change in the fusing pressure release sensor signal cannot be detected within the specified time after outputting the fusing pressure release motor.
Detail	PCU
Cause	Fusing pressure release sensor trouble. Fusing pressure release motor trouble. Pressure release drive gear and pressure release idle gear trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Replace the fusing pressure release sensor. Replace the fusing pressure release motor. Replace the pressure release drive gear and the pressure release idle gear. Replace the PCU PWB. Check connection of the connector and the harness.

**L4-31 Paper exit cooling fan trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Paper exit cooling fan trouble. PCU PWB trouble Connection trouble of the connector and the harness.
Check & Remedy	Check connection of the connectors and the harness. Use SIM6-2 to check the rotating operation of the fan. Replace the paper exit cooling fan. Replace the PCU PWB.

**L4-32 Power source cooling fan trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Power cooling fan trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Use SIM6-2 to check that the fan is actually rotating. Replace the power cooling fan. Replace the PCU PWB. Check connection of the connectors and the harness.

**L4-34 LSU cooling fan trouble**

Trouble content	
Detail	PCU
Cause	When the LSU cooling fan is operated, the fan operation signal is not detected within the specified time. LSU fan trouble. Harness, connector trouble. LSU mother PWB trouble.
Check & Remedy	Use SIM6-2 to check the fan operation. Check the LSU fan, and replace if necessary. Check the harness/connector, and replace if necessary. Check the LSU mother PWB, and replace if necessary.

**L4-35 Fusing cooling fan trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Fusing cooling fan trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Use SIM6-2 to check that the fan is actually rotating. Replace the fusing cooling fan. Replace the PCU PWB. Check connection of the connector and the harness.

**L4-43 Paper exit cooling fan 2 trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Paper exit cooling fan trouble. (Machine R side) PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Replace the fan. Replace the PCU PWB. Check the connector and the harness. Use SIM6-2 to check that the fan is actually rotating.

**L4-50 Process fan trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Process fan trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Check that the fan is rotating after turning ON the power. Replace the process fan. Replace the PCU PWB. Check connection of the connector and the harness.

**L4-51 Process fan 2 trouble**

Trouble content	The fan operation signal is not detected.
Detail	PCU
Cause	Fan trouble. PCU PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Replace the fan. Replace the PCU PWB. Check the connector and the harness. Check that the fan is rotating after turning ON the power.

**L6-10 Polygon motor trouble**

Trouble content	The polygon motor does not reach the specified RPM within the specified time after starting rotation of the polygon motor.
Detail	PCU
Cause	Polygon motor trouble. LSU mother PWB trouble. Connection trouble of the connector and the harness.
Check & Remedy	Use SIM61-1 to check the operation of the polygon motor. Check connection of the connector and the harness. Replace the LSU. Replace the LSU mother PWB.

**L8-01 Full wave signal detection error**

Trouble content	The full wave signal is not detected.
Detail	PCU
Cause	PCU PWB trouble. Power unit trouble. Connection trouble of the connector and the harness.
Check & Remedy	Replace the PCU PWB. Replace the power unit. Check connection of the connector and the harness.

**L8-20 Communication error of MFPC PWB/LSU mother board**

Trouble content	
Detail	MFP
Cause	LSU mother board PWB - MFPC PWB connection trouble. MFPC PWB trouble. LSU mother board trouble.
Check & Remedy	Check connection between the LSU mother board PWB and the MFPC PWB. Check the ground of the main unit. Replace the MFPC PWB. Replace the LSU mother board.

**P1-00 PCI communication error**

Trouble content	
Detail	MFP
Cause	Communication error between the MFPC PWB and the PCI. Connection failure of connectors and harness between the MFPC PWB and the PCI. MFPC PWB trouble. PCI control PWB trouble.
Check & Remedy	Check connection of the harness and connectors between the MFPC PWB and the PCI. Check the MFPC PWB, and replace if necessary. (Refer to the necessary procedures after replacement of the MFPC PWB in the Service Manual, and perform the procedures.) Check the PCI control PWB, and replace if necessary.

**P1-01 PCI fan error**

Trouble content	
Detail	MFP
Cause	The PCI fan operation signal is not detected. PCI fan trouble. PCI control PWB trouble.
Check & Remedy	Check connection of the connectors and harness between the PCI fan and the PCI control PWB. Check the PCI control PWB, and replace if necessary. Check the PCI fan, and replace if necessary.

**P1-02 Plasma generating device error**

Trouble content	
Detail	MFP
Cause	Connection failure of connectors and harness between the plasma generating device and the PCI control PWB. Plasma generating device trouble. PCI control PWB trouble.
Check & Remedy	Check connection of the connectors and harness between the plasma generating device and the PCI control PWB. Replace the plasma generating device. Check the PCI control PWB, and replace if necessary.

**PC-- Personal counter not detected**

Trouble content	
Detail	MFP
Cause	The personal counter is not installed. The personal counter is not detected. SCU PWB trouble.
Check & Remedy	Check connection of the connectors and the harness. Replace the SCU PWB.

**U1-01 Battery trouble**

Trouble content		RTC backup battery voltage fall
Detail		MFP
Case 1	Cause	1) Battery life 2) Battery circuit abnormality
	Check and Remedy	Check to confirm that the battery voltage is about 2.5V or above. Replace the battery.

**U2-00 MFP EEPROM read/write error**

Trouble content	
Detail	MFP
Cause	MFPC PWB EEPROM trouble EEPROM socket contact trouble MFPC PWB trouble Strong external noises.
Check & Remedy	Replace the MFPC PWB EEPROM. Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the MFPC PWB in the Service Manual, and perform the works.) Check the power environment.

## **U2-05 HDD/MFPC PWB SRAM contents inconsistency (18cpm/20cpm/23cpm/31cpm(G) machine)**

Trouble content	The HDD or the MFPC PWB installed is improper. (Erroneous detection of account management data)
Detail	MFP
Cause	The HDD was replaced. The MFPC PWB was replaced. HDD trouble MFPC PWB trouble
Check & Remedy	(Refer to the pages on the necessary works after replacing the HDD and the MFPC PWB in the Service Manual, and perform the works.) Use SIM16 to cancel the error.

## **U2-05 Erroneous detection of account management data / HDD internal authentication DB table error (26cpm/36cpm/31cpm(A) machine)**

Trouble content	
Detail	MFP
Cause	The HDD internal authentication DB table is broken. After detection of the broken authentication DB table, the machine is rebooted to rebuild the authentication table. This error can be confirmed only by the error history of SIM22-4. If frequent occurrence of this error is found, the following devices may possibly be damaged. HDD trouble MFPC PWB trouble
Check & Remedy	Check the HDD, and replace if necessary. Check the MFPC PWB, and replace if necessary. When replacing the HDD and the MFPC PWB, refer to "Necessary works and procedures for replacement of HDD and MFPC PWB" and perform the necessary procedures. If this error does not occur frequently, the above procedure is not required.

## **U2-10 MFPC PWB SRAM user authentication index check sum error**

Trouble content	
Detail	MFP
Cause	SRAM user index information (user authentication basic data) check sum error. MFPC PWB SRAM trouble. MFPC PWB trouble. Strong external noises.
Check & Remedy	Use SIM16 to cancel the error. (Index information data in the HDD are transferred to the SRAM.) Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the MFPC PWB in the Service Manual, and perform the works.)

## **U2-11 MFPC PWB EEPROM counter check sum error**

Trouble content	
Detail	MFP
Cause	MFPC PWB EEPROM trouble EEPROM socket contact trouble MFPC PWB trouble Strong external noises.
Check & Remedy	Use SIM16 to cancel the error. (The previous writing data (about the latest 8 sheets) are written into the EEPROM.) Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the MFPC PWB in the Service Manual, and perform the works.)

## **U2-24 MFPC PWB SRAM memory user authentication counter check sum error**

Trouble content	
Detail	MFP
Cause	MFPC PWB SRAM trouble MFPC PWB trouble Strong external noises.
Check & Remedy	Use SIM16 to cancel the error. (The check sum error detection data are calculated again to reset the proper check sum data.) Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the MFPC PWB in the Service Manual, and perform the works.)

## **U2-30 MFPC PWB and PCU PWB manufacturing No. data inconsistency**

Trouble content	Inconsistency between the manufacturing No. saved in the PCU PWB and that in the MFPC PWB.
Detail	MFP
Cause	When replacing the PCU PWB or the MFPC PWB, the EEPROM which was mounted on the PWB before replacement is not mounted on the new PWB. MFPC PWB trouble PCU PWB trouble
Check & Remedy	Check that the EEPROM is properly set. Check to confirm that the EEPROM which was mounted on the PWB before replacement is mounted on the new PWB. Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the MFPC PWB in the Service Manual, and perform the works.) Replace the PCU PWB.

## **U2-40 SD card system storage data area error**

Trouble content	
Detail	MFP
Cause	A file error occurs in the SD card system storage data partition. SD card trouble MFPC PWB trouble
Check & Remedy	Turn OFF/ON the power, and the backup data in the HDD are written into the SD card and the machine is automatically booted. Check the MFPC PWB, and replace if necessary. Check the SD card, and replace if necessary.

**U2-41 HDD system storage data area error**

Trouble content	
Detail	MFP
Cause	A file error occurs in the HDD system saved data area, disabling backup of the saved file of the machine adjustment values in the SD card. HDD trouble MFPC PWB trouble
Check & Remedy	Check the HDD, and replace if necessary. Check the MFPC PWB, and replace if necessary. When replacing the HDD and the MFPC PWB, refer to the chapter of "Necessary works and procedures of HDD and MFPC PWB replacement."

**U2-42 Machine adjustment data (system storage data area) error**

Trouble content	
Detail	MFP
Cause	The saved file of the machine adjustment values in the SD card and the HDD cannot be found or is broken. Both of the SD card set data and the HDD system saved data area are broken. HDD trouble MFPC PWB trouble SD card trouble
Check & Remedy	Check the HDD, and replace if necessary. Check the MFPC PWB, and replace if necessary. Check the SD card, and replace if necessary. When replacing the HDD, the MFPC PWB, and the SD card, refer to the chapter of "Necessary works and procedures of HDD, MFPC PWB, and SD card replacement." Use SIM to adjust the machine again and set the adjustment values.

**U2-50 HDD\*1 user authentication data check sum error**

Trouble content	
Detail	MFP
Cause	HDD trouble*1 MFPC PWB trouble Strong external noises.
Check & Remedy	Check the data related to the check sum error (address book, image send system registration data (senders record, meta data)) and register again. Use SIM16 to cancel the U2 trouble. Replace the HDD*1. Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the HDD and the MFPC PWB in the Service Manual, and perform the works.)*1

\*1: SD card when no HDD is installed.

**U2-60 Watermark check error**

Trouble content	
Detail	MFP
Cause	Watermark data trouble HDD trouble MFPC PWB trouble
Check & Remedy	Use SIM16 to cancel the U2 trouble. Use SIM49-5 to install the watermark data. Replace the HDD. Replace the MFPC PWB. (Refer to the pages on the necessary works after replacing the HDD and the MFPC PWB in the Service Manual, and perform the works.)

**U2-80 SCU PWB EEPROM read/write error**

Trouble content	
Detail	SCU
Cause	SCU PWB EEPROM trouble SCU PWB trouble SCU PWB EEPROM socket connection trouble
Check & Remedy	Replace the SCU PWB EEPROM. Replace the SCU PWB. Check connection of the SCU PWB EEPROM socket. Check the SIM adjustment value of the following items, and adjust again if they are improper. • Scanner-related adjustments • Touch panel-related adjustments Use SIM16 to cancel the trouble.

**U2-81 SCU PWB EEPROM check sum error**

Trouble content	
Detail	SCU
Cause	SCU PWB EEPROM trouble. Installation of non-initialized EEPROM. SCU PWB trouble. EEPROM socket contact trouble.
Check & Remedy	Replace the SCU PWB EEPROM. Replace the SCU PWB. Check contact of the EEPROM socket. Use SIM16 to cancel the trouble. (The check sum error detection data are calculated again to reset the proper check sum data.)

**U2-90 PCU PWB EEPROM read/write error**

Trouble content	
Detail	PCU
Cause	PCU PWB EEPROM trouble PCU PWB trouble EEPROM socket contact trouble
Check & Remedy	Replace the PCU PWB EEPROM. Check the SIM adjustment values of the engine, and adjust again if they are improper. Replace the PCU PWB. Check contact of the EEPROM socket. Use SIM16 to cancel the trouble.

**U2-91 PCU PWB EEPROM check sum error**

Trouble content	
Detail	PCU
Cause	PCU PWB EEPROM trouble PCU PWB trouble EEPROM socket contact trouble
Check & Remedy	Replace the PCU PWB EEPROM. Replace the PCU PWB. Check contact of the EEPROM socket. Use SIM16 to cancel the trouble. (The check sum error detection data are calculated again to reset the proper check sum data.)

**U6-00 PCU PWB - Paper feed desk (paper feed tray 3, 4) communication trouble**

Trouble content	
Detail	PCU
Cause	Connection trouble of the connector and the harness. Paper feed desk control PWB trouble PCU PWB trouble
Check & Remedy	Check connection of the connector and the harness. Replace the paper feed desk control PWB. Replace the PCU PWB.

**U6-01 Desk paper feed tray 1 lift trouble**

Trouble content	D1ULD does not turn ON within the specified time when lift-up operation.
Detail	PCU
Cause	D1ULD sensor trouble. Desk control PWB trouble. Lift unit trouble. Connection trouble of the connector and the harness. PCU PWB trouble.
Check & Remedy	Replace the D1ULD sensor. Replace the desk control PWB. Replace the lift unit. Check connection of the connector and the harness. Replace the PCU PWB.

**U6-02 Desk paper feed tray 2 lift trouble**

Trouble content	D2ULD does not turn ON within the specified time when lift-up operation.
Detail	PCU
Cause	D2ULD sensor trouble Desk control PWB trouble Lift unit trouble Connection trouble of the connector and the harness. PCU PWB trouble
Check & Remedy	Replace the D2ULD sensor. Replace the desk control PWB. Replace the lift unit. Check connection of the connector and the harness. Replace the PCU PWB.

**U6-09 LCC lift motor trouble**

Trouble content	No variation in the motor rotation sensor signal (encoder sign) is detected within the specified time after booting or stopping the LCC lift motor.
Detail	PCU
Cause	LCC lift motor rotation sensor trouble LCC control PWB trouble LCC lift mechanism trouble LCC lift motor trouble
Check & Remedy	Use SIM4-2 and 4-3 to check the operation of the LCC sensor and the lift motor. Check the LCC lift motor rotation sensor, and replace if necessary. Check the LCC control PWB, and replace if necessary. Check the LCC lift mechanism, and repair if necessary. Check the LCC lift motor, and replace if necessary. Use SIM15 to cancel the trouble.

**U6-10 Desk paper feed unit paper transport motor trouble**

Trouble content	
Detail	PCU
Cause	Desk paper feed motor trouble (motor lock, motor rpm abnormality, over-current to the motor). Desk control PWB trouble Connection trouble of the connector and the harness.
Check & Remedy	Use SIM4-3 to check the operation of the desk transport motor. Replace the desk control PWB. Replace the desk paper feed motor. Check connection of the connector and the harness.

**U6-20 LCC control PWB - PCU PWB communication error**

Trouble content	.
Detail	PCU
Cause	Communication error between the LCC control PWB and the PCU PWB. Connection trouble of the harness and the connector between the machine and the LCC and those of the LCC control PWB. LCC control PWB trouble PCU PWB trouble Malfunction due to noises.
Check & Remedy	Check to confirm the LCC model. Check the connection of the harness and the connector between the machine and the LCC and those of the LCC control PWB, and replace if necessary. Check the LCC control PWB, and replace if necessary. Check the PCU PWB, and replace if necessary.



**U6-21 LCC transport motor trouble**

Trouble content	No variation in the motor rotation sensor signal (encoder sign) is detected within the specified time after booting or stopping the LCC transport motor.
Detail	PCU
Cause	LCC transport motor rotation sensor trouble LCC control PWB trouble LCC paper transport mechanism trouble LCC paper transport motor trouble
Check & Remedy	Use SIM4-3 to check the operation of the LCC transport motor. Check the LCC transport motor rotation sensor, and replace if necessary. Check the LCC control PWB, and replace if necessary. Check the LCC paper transport mechanism, and replace if necessary. Check the LCC transport motor, and replace if necessary.

**U6-22 LCC 24V power trouble**

Trouble content	The power voltage of DC24V is not supplied to the LCC unit.
Detail	PCU
Cause	Connection trouble of the harness and the connector between the machine and the LCC and those of the LCC control PWB. LCC control PWB trouble Machine power unit trouble
Check & Remedy	Check the connection of the harness and the connector between the machine and the LCC and those of the LCC control PWB, and replace if necessary. Check the LCC control PWB, and replace if necessary. Check the machine power unit, and replace if necessary.

**U6-50 Desk - Main unit combination trouble**

Trouble content	
Detail	PCU
Cause	Improper combination between the main unit and the desk. Desk control PWB trouble.
Check & Remedy	Install a desk which is proper for the main unit mode. Replace the desk control PWB.

**U6-51 LCC - Main unit combination trouble**

Trouble content	An LCC of a different model which is not supported by the machine is installed. (Improper combination of the machine and the LCC model code.)
Detail	PCU
Cause	LCC control PWB trouble PCU PWB trouble
Check & Remedy	Check to confirm the LCC model. Check the LCC control PWB, and replace if necessary. Check the PCU PWB, and replace if necessary.

**U6-52 PCU PWB - Paper feed desk (paper feed tray 2) communication trouble**

Trouble content	Paper feed tray 2 (desk unit) is not recognized.
Detail	PCU
Cause	Connection failure between the machine and paper feed tray 2 (desk unit) PCU PWB trouble.
Check & Remedy	Check connection of the connector and the harness. Replace the PCU PWB.

**U7-50 MFPC PWB - Vendor machine communication error**

Trouble content	Communication error between the MFP and the serial vendor.
Detail	MFP
Cause	Improper setting of the vendor machine specifications (SIM26-3). Vendor machine trouble. MFPC PWB trouble. Connector, harness connection trouble. Strong external noises.
Check & Remedy	Cancel the error by turning OFF/ON the power. Check the connector and the harness in the communication line. Change the specifications of the vendor machine (SIM26-3). Replace the MFPC PWB.

**U7-51 Vendor machine error**

Trouble content	
Detail	MFP (Notification of a trouble from the serial vendor)
Cause	Serial vendor machine trouble. Connector, harness connection trouble.
Check & Remedy	Err.XX is displayed on the operation panel of the vendor. (XX is the detail code.) Repair the vendor machine referring to the detail code. Check the connector and the harness in the communication line.

**UC-02 CPT - ASIC error**

Trouble content	
Detail	SCU
Cause	SCU PWB trouble. (CPT-ASIC trouble.)
Check & Remedy	Replace the SCU PWB.

**UC-20 DOCC ASIC error**

Trouble content	
Detail	SCU
Cause	SCU PWB trouble. (DOCC-ASIC trouble.)
Check & Remedy	Replace the SCU PWB.

## (1) Descriptions on E7-91 - 94 errors

Two-digit numbers with double parentheses are added to E7-91 - 94 error codes recorded in SIM22-6 indicate the detailed contents of the errors.

The number in each digit has its own meaning.

(Example) E7-91(\*\*)

The upper digit of the added code indicates the job kind at the occurrence of the error.

Error code	The upper digit of the added code	Image type	Job kind at the occurrence of the error	
E7-91	0*	Other	• FAX (Internet FAX) reception print (Other than long size images)	*1
	1*	JPEG		*1
	2*	JBIG		*1
	3*	Mxx1ch		
	4*	Mxx4ch		
	5*	Other	• FAX (Internet FAX) reception print (Long size images)	*1
	6*	JPEG		*1
	7*	JBIG		*1
	8*	Mxx1ch		
	9*	Mxx4ch		
	A* - F*	Not Used		*1
E7-92	0*	Other	• OC copy (in Non ERDH)	*1
	1*	JPEG		
	2*	JBIG		*1
	3*	Mxx1ch		*1
	4*	Mxx4ch		
	5* - F*	Not Used		*1
E7-93	0*	Other	• Copy print (in ERDH) • Copy composing system function (Custom Stamp, Water mark)	*1
	1*	JPEG		
	2*	JBIG		
	3*	Mxx1ch		*1
	4*	Mxx4ch		
	5*	Other	• Image send • Document filing • Preview display	*1
	6*	JPEG		
	7*	JBIG		
	8*	Mxx1ch		
	9*	Mxx4ch		
	A*	Other	• GDI/PCL printer print • Copy composing system function (Custom Stamp, Water mark)	*1
	B*	JPEG		
	C*	JBIG		
	D*	Mxx1ch		*1
	E*	Mxx4ch		
	F*	Not Used		*1
E7-94	0*	Other	• Backup restore (Filing data import)	*1
	1*	JPEG		
	2*	JBIG		*1
	3*	Mxx1ch		*1
	4*	Mxx4ch		*1
	5* - F*	Not Used		*1

\*1: Added code without generating

The lower digit of the added code indicates the kind and the content of the abnormality or the result of the automatic memory check executed when the abnormality is detected.

			Lower digit of the added code → Kind/Content of the error							
			*1	*9	*A	*B	*C	*D	*E	*F
			Memory verify NG	—	Huffman code error	Restart marker error	Improper marker error	Head decoding error detection (ASIC detection)	Head decoding error detection (CPU detection)	Other abnormal termination
The upper digit of the added code ↓ Error detection circuit	1*, 6*, B*	JPEG	●	—	○	○	○	○	—	○
	2*, 7*, C*	JBIG	●	—	—	—	○	○	—	○
	3*, 8*, D*	Mxx1ch	●	—	—	—	—	—	—	○
	4*, 9*, E*	Mxx4ch	●	—	—	—	—	—	—	○

● : Added code indicating that the memory and its peripheral must be focused for check in case of an error.

○ : Added code indicating that doubtful sections are in a wider range such as the memory, PWB's, HDD, etc.

— : Added code without generating

## (2) Countermeasures in case of E7-91 - 94

In case of E7-9x (11), E7-9x (21), E7-9x (31), E7-9x (41)

Cause	In case of E7-91 - 94, the DIMM memory (DRAM) is automatically read/written to perform a simplified check. If an abnormality is detected in that case, the added code becomes (*1). Therefore, there is a strong possibility that an abnormality lies around the memory.
Check and remedy	<ul style="list-style-type: none"> <li>Check the installing state of the DIMM memory and the MFPC PWB to insure that there is no abnormality. (Disconnect and connect the DIMM memory and the MFPC PWB to check to insure that there is no error occurring again.)</li> <li>Use SIM60-01 (Memory read/write check) to check to insure that no error occurs.</li> <li>Replace the DIMM memory.</li> <li>Replace the MFPC PWB.</li> </ul>

### Note

Since the automatic memory check executed when E7-91 - 94 occurs is a simplified check, it cannot detect an abnormality with absolute certainty.

If the added code is (\*1), there may be a memory abnormality. Even if it is not (\*1), however, it cannot be said that there is no abnormality around the memory.

### Other added codes

Cause	Mostly because the data inputted to the ASIC for decoding are broken for some reasons. There is an abnormality in the process of read/write of the process data in the memory or the hard disk. A great noise unexpectedly generated may be the cause. For the cases of FAX or Internet FAX reception data, when broken data are saved, printing is performed every time when the machine is booted, generating an error repeatedly. (E7-91) (To clear the received data, execute SIM66-10.)
Check and remedy	<ul style="list-style-type: none"> <li>Check the DIMM memory, the MFPC PWB, and the HDD to insure that there is no abnormality.</li> <li>When the job at occurrence of an error is FAX (E7-91), check the installing state of the FAX control PWB and the SC CARD PWB.</li> <li>Perform SIM60-01 (Memory read/write check) to insure that there is no NG.</li> <li>Perform SIM62-02 and SIM62-03 (HDD read/write check) to insure that there is no NG. (It is not required, however, when the job at occurrence of an error is FAX.)</li> <li>Check the installing state of the DIMM memory and the MFPC PWB to insure that there is no abnormality. (Disconnect and connect the DIMM memory and the MFPC PWB to check to insure that there is no error occurring again.)</li> <li>Replace the HDD.</li> <li>Replace the FAX control PWB.</li> <li>Replace the DIMM memory.</li> <li>Replace the MFPC PWB.</li> <li>Replace the SD card.</li> </ul>

### Note

When there is an abnormality around the HDD, E7-03 may occur.

If error E7-91 - 94 as well as E7-03 occurs, there is a high possibility that the error can be removed by replacing the HDD and the MFPC PWB.

## (3) Countermeasures against the case where nothing is displayed when the machine is booted

### [Trouble content]

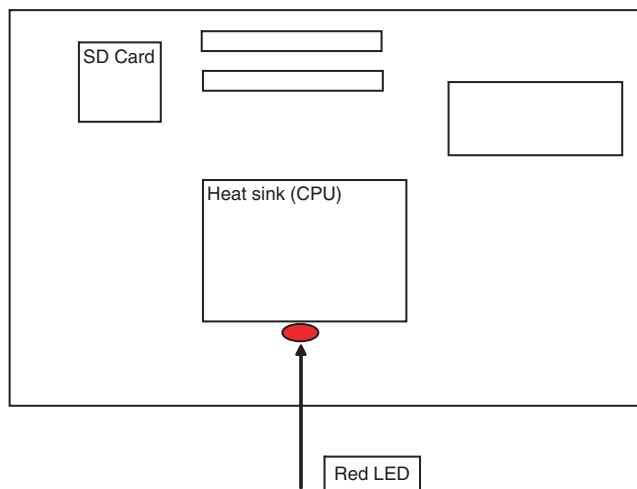
If nothing is displayed when the machine is booted, the error code cannot be checked and the cause is hard to identify.

One of the causes may be an abnormality in the boot program of the SD card. To check that, the following method is used.

### [Check method]

Check to confirm that the LED (red) under the CPU heat sink on the MFPC PWB shown in the figure below is lighted when the power is supplied.

If the LED is lighted, it is judged as an abnormality of the SD card.



### [Countermeasures]

- 1) Replace the SD card with a new one. (Be sure to use a service part.)
- 2) Upgrade the firmware to the latest version.
- 3) Use SIIM66-62 to backup the FAX reception data from the HDD to a USB memory device. (If there is no FAX reception data, this procedure is not required.) (The FAX reception data are backed up in the PDF format. Supply the data to the user.)
- 4) Use SIM66-10 to clear the FAX and image send memory. (Ensure consistency between the HDD data and the image related memory.)

#### (4) Relation between the MFPC PWB LED status and errors

When the machine cannot be booted, check the LED status of the MFPC PWB to presume the error content and its cause.

##### <Process content and LED display>

LED status (Lighting)	Process operation content	Cause for halt during operation
○○○○	CPU initial setting	Reus ASIC trouble
○○○●	Memory adjustment	Memory and its peripheral circuit trouble
○○●○	Memory check	Memory and its peripheral circuit trouble
○○●●	—	—
○●○○	Program memory development	Memory-related trouble
○●○●	Interruption-related initialization	Reus ASIC trouble
○●●○	PCIe initialization	PCIe and its peripheral circuit trouble (SoC/ACRE, etc.)
○●●●	Basic device initialization	Reus ASIC trouble
●○○○	SD card initialization SATA initialization	Reus ASIC trouble SD card trouble HDD trouble
●○○●	OS initialization (1)	Reus ASIC trouble
●○●○	Timer enabling	Reus ASIC trouble
●○●●	Serial driver enabling I2C driver enabling	Reus ASIC trouble
●●○○	LCD initialization	Reus ASIC trouble
●●●○	Image process IP initialization	Reus ASIC trouble
●●●○	OS initialization (2)	Reus ASIC trouble
●●●●	Main process	Reus ASIC trouble

\* ●: LED ON / ○: LED OFF

##### <When an error occurs>

LED status (Flashing)	Error content	Cause
○○○●	Nonsupport memory	Memory trouble
○○●○	Nonsupport memory (access speed)	Memory trouble
○○●●	Nonsupport memory controller	Memory trouble
○●○○	DDR-PHY setting error	Reus ASIC trouble
○●●○	Interruption handler process error	Reus ASIC trouble
●○○○	Memory check error	Memory trouble
●●●●	Memory combination error	Memory trouble

\* In case of an error, the LED's flash as shown in the above table.

\* ●: LED ON / ○: LED OFF

○ ○ ○ ○ ●

LED No    D25/D24/D23/D22  
             3 / 2 / 1 / 0

## 2. JAM and troubleshooting

### A. JAM code list

#### (1) Main unit (18cpm/20cpm machine)

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
TRAY1	Main cassette paper feed JAM (CPFD1 not-reached JAM)	CPUC1 ON	CPFD1 ON	103.4	65.0	168.4
CPFD1_N2	CPFD1 not-reached JAM (Main cassette 2 feed paper)	CPFD2 ON	CPFD1 ON	99.1	65.0	164.1
CPFD1_N3	CPFD1 not-reached JAM (Desk upper stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
CPFD1_N4	CPFD1 not-reached JAM (Desk lower stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
TRAY2	CPFD2 not-reached JAM (Main cassette 2 feed paper)	CPUC2 ON	CPFD2 ON	103.4	65.0	168.4
CPFD2_N3	CPFD2 not-reached JAM (Desk upper stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
CPFD2_N4	CPFD2 not-reached JAM (Desk lower stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
MFT	Manual feed tray paper feed JAM (PPD1 not-reached)	MPFS ON	PPD1 ON	83.2	65.0	148.2
PPD1_N1	PPD1 not-reached JAM (Cassette 1 feed paper)	CPFD1 ON	PPD1 ON	151.9	65.0	216.9
PPD1_N2	PPD1 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N3	PPD1 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N4	PPD1 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_NA	PPD1 not-reached JAM (ADU refeed paper)	APPD2 ON	PPD1 ON	135.7	65.0	200.7
PPD2_N1	PPD2 not-reached JAM (Main cassette feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N2	PPD2 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N3	PPD2 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N4	PPD2 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_NM	PPD2 not-reached JAM (Manual feed tray feed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NA	PPD2 not-reached JAM (ADU refeed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
POD1_N	POD1 not-reached JAM	RRM ON	POD1 ON	242.4	50.0	292.4
POD2_N	POD2 not-reached JAM	POD1 ON	POD2 ON	92.2	65.0	157.2
POD3_N	POD3 not-reached JAM	Reversing start	POD3 ON	53.7	65.0	118.7
APPD1_N	APPD1 not-reached JAM	Reversing start	APPD1 ON	39.3	65.0	104.3
APPD2_N	APPD2 not-reached JAM	APPD1 ON	APPD2 ON	226.3	65.0	291.3
CPFD1_S1	CPFD1 remaining JAM (Main cassette paper)	CPUC1 OFF	CPFD1 OFF	144.4	65.0	209.4
CPFD1_S2	CPFD1 remaining JAM (Main cassette 2 feed paper)	CPFD2 OFF	CPFD1 OFF	96.8	65.0	161.8
CPFD1_S3	CPFD1 remaining JAM (Desk upper stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD1_S4	CPFD1 remaining JAM (Desk lower stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD2_S2	CPFD2 remaining JAM (Main cassette 2 feed paper)	CPUC2 OFF	CPFD2 OFF	144.4	65.0	209.4
CPFD2_S3	CPFD2 remaining JAM (Desk upper stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
CPFD2_S4	CPFD2 remaining JAM (Desk lower stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PPD1_S1	PPD1 remaining JAM (Main cassette paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S2	PPD1 remaining JAM (Main cassette 2 feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S3	PPD1 remaining JAM (Desk upper stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S4	PPD1 remaining JAM (Desk lower stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_SM	PPD1 remaining JAM (Manual feed tray feed paper)	PPD1 ON	PPD1 OFF	Sub scan size -9	65.0	Sub scan size -9+65
PPD1_SA	PPD1 remaining JAM (ADU refeed paper)	APPD2 OFF	PPD1 OFF	131.1	65.0	196.1
PPD2_S1	PPD2 remaining JAM (Main cassette feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S2	PPD2 remaining JAM (Main cassette 2 feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S3	PPD2 remaining JAM (Desk upper stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S4	PPD2 remaining JAM (Desk lower stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_SM	PPD2 remaining JAM (Manual feed tray feed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SA	PPD2 remaining JAM (ADU refeed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
POD1_S	POD1 remaining JAM	PPD2 OFF	POD1 OFF	297.6	65.0	362.6
POD2_S	POD2 remaining JAM (When left paper exit)	POD1 OFF	POD2 OFF	90.2	65.0	155.2
	POD2 remaining JAM (When ADU reversing)	Reversing start	POD2 OFF after starting reversing	Sub scan size -60.6	65.0	Sub scan size -60.6 + 65
POD3_S	POD3 remaining JAM	POD2 OFF after starting reversing	POD3 OFF	68.9	65.0	133.9
APPD1_S	APPD1 remaining JAM	POD2 OFF after starting reversing	APPD1 OFF	111.0	65.0	176.0
APPD2_S	APPD2 remaining JAM	APPD1 OFF	APPD2 OFF	228.8	65.0	293.8
PPD2_PRI	PPD2 JAM (Image preparation wait time-out)	Transmission of the IMAGE_PREPARE command to ICU	Reception time-out of the END_IMAGE_PREPARE command from ICU (50 sec)	—	—	—
CPFD2_DESK	CPFD2 JAM (Desk communication abnormality detection)	Transmission of the preliminary paper feed request command to DESK	Reception time-out of the preliminary paper feed start command from DESK (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from DESK	Reception time-out of the preliminary paper feed end command from DESK (30 sec)	—	—	—
		Transmission of the paper feed request command to DESK	Reception time-out of the paper feed start command from DESK (30 sec)	—	—	—
		Reception of the paper feed start command from DESK	Reception time-out of the paper feed end command from DESK (30 sec)	—	—	—
PPD2_FIN	PPD2 JAM (Finisher communication abnormality detection)	Transmission of the paper attribute data command to FINISHER	Reception time-out of the paper interval data command from FINISHER (30 sec)	—	—	—

## (2) Main unit (23cpm machine)

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
TRAY1	Main cassette paper feed JAM (CPFD1 not-reached JAM)	CPUC1 ON	CPFD1 ON	103.4	65.0	168.4
CPFD1_N2	CPFD1 not-reached JAM (Main cassette 2 feed paper)	CPFD2 ON	CPFD1 ON	99.1	65.0	164.1
CPFD1_N3	CPFD1 not-reached JAM (Desk upper stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
CPFD1_N4	CPFD1 not-reached JAM (Desk lower stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
TRAY2	CPFD2 not-reached JAM (Main cassette 2 feed paper)	CPUC2 ON	CPFD2 ON	103.4	65.0	168.4
CPFD2_N3	CPFD2 not-reached JAM (Desk upper stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
CPFD2_N4	CPFD2 not-reached JAM (Desk lower stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
MFT	Manual feed tray paper feed JAM (PPD1 not-reached)	MPFS ON	PPD1 ON	83.2	65.0	148.2
PPD1_N1	PPD1 not-reached JAM (Cassette 1 feed paper)	CPFD1 ON	PPD1 ON	151.9	65.0	216.9
PPD1_N2	PPD1 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N3	PPD1 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N4	PPD1 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_NA	PPD1 not-reached JAM (ADU refeed paper)	APPD2 ON	PPD1 ON	135.7	65.0	200.7
PPD2_N1	PPD2 not-reached JAM (Main cassette feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N2	PPD2 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N3	PPD2 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N4	PPD2 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_NM	PPD2 not-reached JAM (Manual feed tray feed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NA	PPD2 not-reached JAM (ADU refeed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
POD1_N	POD1 not-reached JAM	RRM ON	POD1 ON	242.4	50.0	292.4
POD2_N	POD2 not-reached JAM	POD1 ON	POD2 ON	92.2	65.0	157.2
POD3_N	POD3 not-reached JAM	Reversing start	POD3 ON	53.7	65.0	118.7
APPD1_N	APPD1 not-reached JAM	Reversing start	APPD1 ON	39.3	65.0	104.3
APPD2_N	APPD2 not-reached JAM	APPD1 ON	APPD2 ON	226.3	65.0	291.3
CPFD1_S1	CPFD1 remaining JAM (Main cassette paper)	CPUC1 OFF	CPFD1 OFF	144.4	65.0	209.4
CPFD1_S2	CPFD1 remaining JAM (Main cassette 2 feed paper)	CPFD2 OFF	CPFD1 OFF	96.8	65.0	161.8
CPFD1_S3	CPFD1 remaining JAM (Desk upper stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD1_S4	CPFD1 remaining JAM (Desk lower stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD2_S2	CPFD2 remaining JAM (Main cassette 2 feed paper)	CPUC2 OFF	CPFD2 OFF	144.4	65.0	209.4
CPFD2_S3	CPFD2 remaining JAM (Desk upper stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
CPFD2_S4	CPFD2 remaining JAM (Desk lower stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
PPD1_S1	PPD1 remaining JAM (Main cassette paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S2	PPD1 remaining JAM (Main cassette 2 feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S3	PPD1 remaining JAM (Desk upper stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S4	PPD1 remaining JAM (Desk lower stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_SM	PPD1 remaining JAM (Manual feed tray feed paper)	PPD1 ON	PPD1 OFF	Sub scan size -9	65.0	Sub scan size -9+65
PPD1_SA	PPD1 remaining JAM (ADU refeed paper)	APPD2 OFF	PPD1 OFF	131.1	65.0	196.1

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PPD2_S1	PPD2 remaining JAM (Main cassette feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S2	PPD2 remaining JAM (Main cassette 2 feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S3	PPD2 remaining JAM (Desk upper stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S4	PPD2 remaining JAM (Desk lower stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_SM	PPD2 remaining JAM (Manual feed tray feed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SA	PPD2 remaining JAM (ADU refeed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
POD1_S	POD1 remaining JAM	PPD2 OFF	POD1 OFF	297.6	65.0	362.6
POD2_S	POD2 remaining JAM (When left paper exit)	POD1 OFF	POD2 OFF	90.2	65.0	155.2
	POD2 remaining JAM (When ADU reversing)	Reversing start	POD2 OFF after starting reversing	Sub scan size -60.6	65.0	Sub scan size -60.6 + 65
POD3_S	POD3 remaining JAM	POD2 OFF after starting reversing	POD3 OFF	68.9	65.0	133.9
APPD1_S	APPD1 remaining JAM	POD2 OFF after starting reversing	APPD1 OFF	111.0	65.0	176.0
APPD2_S	APPD2 remaining JAM	APPD1 OFF	APPD2 OFF	228.8	65.0	293.8
PPD2_PRI	PPD2 JAM (Image preparation wait time-out)	Transmission of the IMAGE_PREPARE command to ICU	Reception time-out of the END_IMAGE_PREPARE command from ICU (50 sec)	—	—	—
CPFD2_DESK	CPFD2 JAM (Desk communication abnormality detection)	Transmission of the preliminary paper feed request command to DESK	Reception time-out of the preliminary paper feed start command from DESK (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from DESK	Reception time-out of the preliminary paper feed end command from DESK (30 sec)	—	—	—
		Transmission of the paper feed request command to DESK	Reception time-out of the paper feed start command from DESK (30 sec)	—	—	—
		Reception of the paper feed start command from DESK	Reception time-out of the paper feed end command from DESK (30 sec)	—	—	—
PPD2_FIN	PPD2 JAM (Finisher communication abnormality detection)	Transmission of the paper attribute data command to FINISHER	Reception time-out of the paper interval data command from FINISHER (30 sec)	—	—	—

### (3) 26cpm/31cpm machine

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
TRAY1	Main cassette paper feed JAM (CPFD1 not-reached JAM)	CPUC1 ON	CPFD1 ON	103.4	65.0	168.4
CPFD1_N2	CPFD1 not-reached JAM (Main cassette 2 feed paper)	CPFD2 ON	CPFD1 ON	99.1	65.0	164.1
CPFD1_N3	CPFD1 not-reached JAM (Desk upper stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
CPFD1_N4	CPFD1 not-reached JAM (Desk lower stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
TRAY2	CPFD2 not-reached JAM (Main cassette 2 feed paper)	CPUC2 ON	CPFD2 ON	103.4	65.0	168.4
CPFD2_N3	CPFD2 not-reached JAM (Desk upper stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
CPFD2_N4	CPFD2 not-reached JAM (Desk lower stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
MFT	Manual feed tray paper feed JAM (PPD1 not-reached)	MPFS ON	PPD1 ON	83.2	65.0	148.2
PPD1_N1	PPD1 not-reached JAM (Cassette 1 feed paper)	CPFD1 ON	PPD1 ON	151.9	65.0	216.9



JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PPD1_N2	PPD1 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N3	PPD1 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N4	PPD1 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_NA	PPD1 not-reached JAM (ADU refeed paper)	APPD2 ON	PPD1 ON	135.7	65.0	200.7
PPD1_NL	PPD1 not-reached JAM (LCC feed paper)	Reception of the paper feed start command from LCC (Extension amount 19mm position)	PPD1 ON	141.7	65.0	206.7
PPD2_N1	PPD2 not-reached JAM (Main cassette feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N2	PPD2 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N3	PPD2 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N4	PPD2 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_NM	PPD2 not-reached JAM (Manual feed tray feed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NA	PPD2 not-reached JAM (ADU refeed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NL	PPD2 not-reached JAM (LCC feed paper)	PPD1 ON	PPD2 ON	71.9	65.0	136.9
POD1_N	POD1 not-reached JAM	RRM ON	POD1 ON	242.4	50.0	292.4
POD2_N	POD2 not-reached JAM	POD1 ON	POD2 ON	92.2	65.0	157.2
POD3_N	POD3 not-reached JAM	Reversing start	POD3 ON	53.7	65.0	118.7
APPD1_N	APPD1 not-reached JAM	Reversing start	APPD1 ON	39.3	65.0	104.3
APPD2_N	APPD2 not-reached JAM	APPD1 ON	APPD2 ON	226.3	65.0	291.3
CPFD1_S1	CPFD1 remaining JAM (Main cassette paper)	CPUC1 OFF	CPFD1 OFF	144.4	65.0	209.4
CPFD1_S2	CPFD1 remaining JAM (Main cassette 2 feed paper)	CPFD2 OFF	CPFD1 OFF	96.8	65.0	161.8
CPFD1_S3	CPFD1 remaining JAM (Desk upper stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD1_S4	CPFD1 remaining JAM (Desk lower stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD2_S2	CPFD2 remaining JAM (Main cassette 2 feed paper)	CPUC2 OFF	CPFD2 OFF	144.4	65.0	209.4
CPFD2_S3	CPFD2 remaining JAM (Desk upper stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
CPFD2_S4	CPFD2 remaining JAM (Desk lower stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
PPD1_S1	PPD1 remaining JAM (Main cassette paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S2	PPD1 remaining JAM (Main cassette 2 feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S3	PPD1 remaining JAM (Desk upper stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S4	PPD1 remaining JAM (Desk lower stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_SM	PPD1 remaining JAM (Manual feed tray feed paper)	PPD1 ON	PPD1 OFF	Sub scan size -9	65.0	Sub scan size -9 + 65
PPD1_SA	PPD1 remaining JAM (ADU refeed paper)	APPD2 OFF	PPD1 OFF	131.1	65.0	196.1
PPD1_SL	PPD1 remaining JAM (LCC refeed paper)	Reception of the paper feed end command from LCC (LPFD OFF)	PPD1 OFF	179.1	65.0	244.1
PPD2_S1	PPD2 remaining JAM (Main cassette feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S2	PPD2 remaining JAM (Main cassette 2 feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S3	PPD2 remaining JAM (Desk upper stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PPD2_S4	PPD2 remaining JAM (Desk lower stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_SM	PPD2 remaining JAM (Manual feed tray feed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SA	PPD2 remaining JAM (ADU refeed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SL	PPD2 remaining JAM (LCC feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
POD1_S	POD1 remaining JAM	PPD2 OFF	POD1 OFF	297.6	65.0	362.6
POD2_S	POD2 remaining JAM (When left paper exit)	POD1 OFF	POD2 OFF	90.2	65.0	155.2
	POD2 remaining JAM (When ADU reversing)	Reversing start	POD2 OFF after starting reversing	Sub scan size -60.6	65.0	Sub scan size -60.6 + 65
POD3_S	POD3 remaining JAM	POD2 OFF after starting reversing	POD3 OFF	68.9	65.0	133.9
APPD1_S	APPD1 remaining JAM	POD2 OFF after starting reversing	APPD1 OFF	111.0	65.0	176.0
APPD2_S	APPD2 remaining JAM	APPD1 OFF	APPD2 OFF	228.8	65.0	293.8
PPD2_PRI	PPD2 JAM (Image preparation wait time-out)	Transmission of the IMAGE_PREPARE command to ICU	Reception time-out of the END_IMAGE_PREPARE command from ICU (50 sec)	—	—	—
CPFD2_DESK	CPFD2 JAM (Desk communication abnormality detection)	Transmission of the preliminary paper feed request command to DESK	Reception time-out of the preliminary paper feed start command from DESK (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from DESK	Reception time-out of the preliminary paper feed end command from DESK (30 sec)	—	—	—
		Transmission of the paper feed request command to DESK	Reception time-out of the paper feed start command from DESK (30 sec)	—	—	—
		Reception of the paper feed start command from DESK	Reception time-out of the paper feed end command from DESK (30 sec)	—	—	—
PPD1_LCC	PPD1 JAM (LCC communication abnormality detection)	Transmission of the preliminary paper feed request command to LCC	Reception time-out of the preliminary paper feed start command from LCC (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from LCC	Reception time-out of the preliminary paper feed end command from LCC (30 sec)	—	—	—
		Transmission of the paper feed request command to LCC	Reception time-out of the paper feed start command from LCC (30 sec)	—	—	—
		Reception of the paper feed start command from LCC	Reception time-out of the paper feed end command from LCC (30 sec)	—	—	—
PPD2_FIN	PPD2 JAM (Finisher communication abnormality detection)	Transmission of the paper attribute data command to FINISHER	Reception time-out of the paper interval data command from FINISHER (30 sec)	—	—	—

#### (4) 36cpm machine

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
TRAY1	Main cassette paper feed JAM (CPFD1 not-reached JAM)	CPUC1 ON	CPFD1 ON	103.4	65.0	168.4
CPFD1_N2	CPFD1 not-reached JAM (Main cassette 2 feed paper)	CPFD2 ON	CPFD1 ON	99.1	65.0	164.1
CPFD1_N3	CPFD1 not-reached JAM (Desk upper stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
CPFD1_N4	CPFD1 not-reached JAM (Desk lower stage feed paper)	CPFD2 ON	CPFD1 ON	107.0	65.0	172.0
TRAY2	CPFD2 not-reached JAM (Main cassette 2 feed paper)	CPUC2 ON	CPFD2 ON	103.4	65.0	168.4
CPFD2_N3	CPFD2 not-reached JAM (Desk upper stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
CPFD2_N4	CPFD2 not-reached JAM (Desk lower stage feed paper)	Reception of the paper feed start command from DESK (At position 45mm from the final roller of the DESK.)	CPFD2 ON	35.5	65.0	100.5
MFT	Manual feed tray paper feed JAM (PPD1 not-reached)	MPFS ON	PPD1 ON	113.2	65.0	178.2
PPD1_N1	PPD1 not-reached JAM (Cassette 1 feed paper)	CPFD1 ON	PPD1 ON	151.9	65.0	216.9
PPD1_N2	PPD1 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N3	PPD1 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_N4	PPD1 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD1 ON	149.6	65.0	214.6
PPD1_NA	PPD1 not-reached JAM (ADU refeed paper)	APPD2 ON	PPD1 ON	133.3	65.0	198.3
PPD1_NL	PPD1 not-reached JAM (LCC feed paper)	Reception of the paper feed start command from LCC (Extension amount 19mm position)	PPD1 ON	141.7	65.0	206.7
PPD2_N1	PPD2 not-reached JAM (Main cassette feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N2	PPD2 not-reached JAM (Main cassette 2 feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N3	PPD2 not-reached JAM (Desk upper stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_N4	PPD2 not-reached JAM (Desk lower stage feed paper)	CPFD1 ON	PPD2 ON	71.9	65.0	136.9
PPD2_NM	PPD2 not-reached JAM (Manual feed tray feed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NA	PPD2 not-reached JAM (ADU refeed paper)	PPD1 ON	PPD2 ON	70.4	65.0	135.4
PPD2_NL	PPD2 not-reached JAM (LCC feed paper)	PPD1 ON	PPD2 ON	71.9	65.0	136.9
POD1_N	POD1 not-reached JAM	RRM ON	POD1 ON	242.4	50.0	292.4
POD2_N	POD2 not-reached JAM	POD1 ON	POD2 ON	92.2	65.0	157.2
POD3_N	POD3 not-reached JAM	Reversing start	POD3 ON	89.5	65.0	154.5
APPD1_N	APPD1 not-reached JAM	Reversing start	APPD1 ON	133.4	65.0	198.4
APPD2_N	APPD2 not-reached JAM	APPD1 ON	APPD2 ON	244.0	65.0	309.0
CPFD1_S1	CPFD1 remaining JAM (Main cassette paper)	CPUC1 OFF	CPFD1 OFF	144.4	65.0	209.4
CPFD1_S2	CPFD1 remaining JAM (Main cassette 2 feed paper)	CPFD2 OFF	CPFD1 OFF	96.8	65.0	161.8
CPFD1_S3	CPFD1 remaining JAM (Desk upper stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD1_S4	CPFD1 remaining JAM (Desk lower stage feed paper)	CPFD2 OFF	CPFD1 OFF	107.0	65.0	172.0
CPFD2_S2	CPFD2 remaining JAM (Main cassette 2 feed paper)	CPUC2 OFF	CPFD2 OFF	144.4	65.0	209.4
CPFD2_S3	CPFD2 remaining JAM (Desk upper stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
CPFD2_S4	CPFD2 remaining JAM (Desk lower stage feed paper)	Reception of the paper feed end command from DESK (The final roller position of DSEK)	CPFD2 OFF	89.2	65.0	154.2
PPD1_S1	PPD1 remaining JAM (Main cassette paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S2	PPD1 remaining JAM (Main cassette 2 feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S3	PPD1 remaining JAM (Desk upper stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_S4	PPD1 remaining JAM (Desk lower stage feed paper)	CPFD1 OFF	PPD1 OFF	149.9	65.0	214.9
PPD1_SM	PPD1 remaining JAM (Manual feed tray feed paper)	PPD1 ON	PPD1 OFF	Sub scan size -9	65.0	Sub scan size -9 + 65
PPD1_SA	PPD1 remaining JAM (ADU refeed paper)	APPD2 OFF	PPD1 OFF	190.8	65.0	255.8

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PPD1_SL	PPD1 remaining JAM (LCC refeed paper)	Reception of the paper feed end command from LCC (LPFD OFF)	PPD1 OFF	179.1	65.0	244.1
PPD2_S1	PPD2 remaining JAM (Main cassette feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S2	PPD2 remaining JAM (Main cassette 2 feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S3	PPD2 remaining JAM (Desk upper stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_S4	PPD2 remaining JAM (Desk lower stage feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
PPD2_SM	PPD2 remaining JAM (Manual feed tray feed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SA	PPD2 remaining JAM (ADU refeed paper)	PPD1 OFF	PPD2 OFF	61.4	65.0	126.4
PPD2_SL	PPD2 remaining JAM (LCC feed paper)	PPD1 OFF	PPD2 OFF	62.9	65.0	127.9
POD1_S	POD1 remaining JAM	PPD2 OFF	POD1 OFF	297.6	65.0	362.6
POD2_S	POD2 remaining JAM (When left paper exit)	POD1 OFF	POD2 OFF	90.2	65.0	155.2
	POD2 remaining JAM (When ADU reversing)	Reversing start	POD2 OFF after starting reversing	Sub scan size -9.4	65.0	Sub scan size -9.4 + 65
POD3_S	POD3 remaining JAM	POD2 OFF after starting reversing	POD3 OFF	104.9	65.0	169.9
APPD1_S	APPD1 remaining JAM	POD2 OFF after starting reversing	APPD1 OFF	146.7	65.0	211.7
APPD2_S	APPD2 remaining JAM	APPD1 OFF	APPD2 OFF	251.6	65.0	316.6
PPD2_PRI	PPD2 JAM (Image preparation wait time-out)	Transmission of the IMAGE_PREPARE command to ICU	Reception time-out of the END_IMAGE_PREPARE command from ICU (50 sec)	—	—	—
CPFD2_DESK	CPFD2 JAM (Desk communication abnormality detection)	Transmission of the preliminary paper feed request command to DESK	Reception time-out of the preliminary paper feed start command from DESK (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from DESK	Reception time-out of the preliminary paper feed end command from DESK (30 sec)	—	—	—
		Transmission of the paper feed request command to DESK	Reception time-out of the paper feed start command from DESK (30 sec)	—	—	—
		Reception of the paper feed start command from DESK	Reception time-out of the paper feed end command from DESK (30 sec)	—	—	—
PPD1_LCC	PPD1 JAM (LCC communication abnormality detection)	Transmission of the preliminary paper feed request command to LCC	Reception time-out of the preliminary paper feed start command from LCC (30 sec)	—	—	—
		Reception of the preliminary paper feed start command from LCC	Reception time-out of the preliminary paper feed end command from LCC (30 sec)	—	—	—
		Transmission of the paper feed request command to LCC	Reception time-out of the paper feed start command from LCC (30 sec)	—	—	—
		Reception of the paper feed start command from LCC	Reception time-out of the paper feed end command from LCC (30 sec)	—	—	—
PPD2_FIN	PPD2 JAM (Finisher communication abnormality detection)	Transmission of the paper attribute data command to FINISHER	Reception time-out of the paper interval data command from FINISHER (30 sec)	—	—	—

## (5) RSPF

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
SPPD1_N	SPPD1 not-reached JAM	Paper feed start (When the document width is more than B5 size.)	SPPD1 ON	51.5	450.0	501.5
SPPD2_N	SPPD2 not-reached JAM	Paper feed start (When the document width is less than B5 size.)	SPPD2 ON	90.2	450.0	540.2
		SPPD1 ON (When the document width is more than B5 size.)	SPPD2 ON	38.7	50.0	88.7
SPPD3_N	SPPD3 not-reached JAM	Restart at the temporal stop position	SPPD3 ON	23.7	50.0	73.7
SPPD4_N	SPPD4 not-reached JAM	SPPD3 ON	SPPD4 ON	149.1	50.0	199.1
SPPD2_NR	SPPD2 reverse not-reached JAM	Reversing start	SPPD2 ON	85.5	50.0	135.5
SPPD1_S	SPPD1 remaining JAM	SPPD1 ON (When the document width is more than B5 size.)	SPPD1 OFF	Normal mode: 431.8mm Long size mode: 1000mm/ 800mm (18cpm/ 20cpm/23cpm model 600dpi mode)	50.0	Normal mode: 481.8mm Long size mode: 1050mm/ 850mm (18cpm/ 20cpm/23cpm model 600dpi mode)
SPPD2_S	SPPD2 remaining JAM	SPPD2 ON (When the document width is less than B5 size.)	SPPD2 OFF	Normal mode: 431.8mm Long size mode: 1000mm/ 800mm (18cpm/ 20cpm/23cpm model 600dpi mode)	50.0	Normal mode: 481.8mm Long size mode: 1050mm/ 850mm (18cpm/ 20cpm/23cpm model 600dpi mode)
		SPPD1 OFF (When the document width is more than B5 size.)	SPPD2 OFF	37.8	50.0	87.8
SPPD3_S	SPPD3 remaining JAM	SPPD2 OFF	SPPD3 OFF	68.8	50.0	118.8
SPPD4_S	SPPD4 remaining JAM	SPPD3 OFF	SPPD4 OFF	153.3	50.0	203.3
SPPD2_SR	SPPD2 reverse remaining JAM	SPPD4 OFF	SPPD2 OFF	100.9	50.0	150.9
SPSD_SCN	Exposure start notification timer end	Arrival at temporal stop position	Exposure start command from ICU to SCU no reception time-out (120 sec)	—	—	—
P_SHORT	Short size JAM	SPPD3 ON	When the document length is less than 120.0mm.	—	—	—
SDFS_S	Paper JAM	Start of the light quantity correction between papers	When canceling of the light quantity correction between papers does not make it in time.	—	—	—
ICU_REQ	ICU factor stop JAM	—	Stop by a job stop request command from ICU to SCU	—	—	—
STOP_JAM	Emergency stop JAM	—	Trouble mode transition request from ICU to SCU Emergency stop by a command	—	—	—

## (6) Desk

JAM code	JAM content	JAM detection method	
		JAM detection start trigger	JAM judgment condition
TRAY3	Cassette 3 (Desk 1) paper feed JAM	D1PFC ON (Paper feed start)	D1PPD does not turn ON within the specified time.
DPFD1_N4	DPFD1 not-reached JAM (Desk 2 feed paper)	D2PPD ON	D1PPD does not turn ON within the specified time.
DPFD1_S3	DPFD1 remaining JAM (Desk 1 feed paper)	D1PPD ON	D1PPD does not turn OFF within the specified time.
DPFD1_S4	DPFD1 remaining JAM (Desk 2 feed paper)	D2PPD OFF	D1PPD does not turn OFF within the specified time.
DPFD2_S4	DPFD2 remaining JAM (Desk 2 feed paper)	D2PPD ON	D2PPD does not turn OFF within the specified time.
TRAY4	Cassette 4 (Desk 2) paper feed JAM	D2PFC ON (Paper feed start)	D2PPD does not turn ON within the specified time.

## (7) LCC

JAM code	JAM content	JAM detection method	
		JAM detection start trigger	JAM judgment condition
LCC	Side LCC paper feed JAM (LPFD not-reached)	LPFC ON (paper feed start)	LPFD does not turn ON within the specified time.
LPFD_SL	LPFD remaining JAM (Side LCC feed paper)	LPFD ON	LPFD does not turn OFF within the specified time.

## (8) Inner finisher

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
FPPD1_N	Finisher inlet port not-reached JAM	Machine paper exit command reception	FPPD1 does not turn ON within the specified time.	134.602 [mm]	400 [mm]	534.602 [mm]
FPPD1_S	Finisher inlet port remaining JAM (When Long-size paper support OFF)	FPPD1 ON	FPPD1 does not turn OFF within the specified time.	464.803 [mm]	50 [mm]	514.803 [mm]
	Finisher inlet port remaining JAM (When Long-size paper support ON)	FPPD1 ON	FPPD1 does not turn OFF within the specified time.	1207.803 [mm]	50 [mm]	1257.803 [mm]
FPDD_S	Bundle exit remaining JAM	Driving the bundle exit roller is started.	FSTPD does not turn OFF within the specified time.	133.1 [mm]	13.66 [mm]	146.76 [mm]
FIN_TIME	Finisher paper early reaching JAM	FPPD1 ON by the prior paper detection	FPPD1 of the next paper turns ON at the timing earlier than the specified paper interval.	Specified paper interval time	30 [mm]	(Paper interval time) - (Paper transport time of 30 [mm]) [msec]
FSTPD_S	Finisher paper exit remaining JAM	Driving the paper exit roller in the straight mode is started.	FSTPD does not turn OFF within the specified time.	96.76 [mm]	50 [mm]	146.76 [mm]
FSTPLJ	Staple JAM	FSHPS OFF after FSM ON	FSHPS does not turn ON within the specified time.	350 [msec]	250 [msec]	600 [msec]

## (9) Saddle finisher

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
PDPPD1_N	Interface inlet port not-reached JAM	Machine paper exit command reception	PDPPD1 does not turn ON within the specified time.	79.6 [mm]	238.8 [mm]	318.4 [mm]
PDPPD1_S	Interface inlet port remaining JAM	PDPPD1 ON	PDPPD1 does not turn OFF within the specified time.	(Paper length + 11.3) [mm]	(Paper length + 11.3) [mm]	(Paper length + 11.3) x 2 [mm]
PDPPD2_N	Interface outlet port not-reached JAM	PDPPD1 ON	PDPPD2 does not turn ON within the specified time.	318.7 [mm]	318.7 [mm]	637.4 [mm]
PDPPD2_S	Interface outlet port remaining JAM	PDPPD2 ON	PDPPD2 does not turn OFF within the specified time.	(Paper length + 11.3) [mm]	(Paper length + 11.3) [mm]	(Paper length + 11.3) x 2 [mm]
FPPD1_N	Finisher inlet port not-reached JAM	PDPPD2 ON	FPPD1 does not turn ON within the specified time.	180.3 [mm]	180.3 [mm]	360.6 [mm]
FPPD1_S	Finisher inlet port remaining JAM	Paper reaches the finisher speed change position.	FPPD1 does not turn OFF within the specified time.	108.4 [mm]	216.8 [mm]	325.2 [mm]
FPPD2_N	Saddle section not-reached JAM	The lead edge of paper reaches the position of 20mm past the saddle No. 1 transport roller.	FPPD2 does not turn ON within the specified time.	110.4 [mm]	110.4 [mm]	220.8 [mm]
FPPD2_S	Saddle section remaining JAM	The rear edge of paper reaches the position of 20mm past the process roller.	FPPD2 does not turn OFF within the specified time.	220.4 [mm]	220.4 [mm]	440.8 [mm]
FPDD_S	Bundle exit remaining JAM	Gripper discharging is started.	FATPD does not turn OFF within the specified time.	437 [msec]	437 [msec]	874 [msec]
		Gripper discharging is completed.	FPDD does not turn ON when gripper discharging is completed.			FPDD OFF

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
FSTPLJ	Staple JAM	Driving the staple motor is started.	FSSHS ON is not detected within the specified time after detection of FSSHS OFF during stapling operation, and FSSHS ON is detected by reverse rotation of the staple motor after stapling operation is stopped.	400 [msec]	200 [msec]	600 [msec]
		Staple extending operation is started.	Staple extending cannot be executed by execution of staple feeding by the specified number of times (9 times) during staple extending operation.			9 times
		Driving the saddle staple motor is started.	FSSHS ON is not detected within the specified time after detection of FSSHS OFF during stapling operation, and FSSHS ON is detected by reverse rotation of the staple motor after stapling operation is stopped.	480 [msec]	240 [msec]	720 [msec]
		Saddle staple extending operation is started.	Staple extending cannot be executed by execution of staple feeding by the specified number of times (14 times) during staple extending operation.			14 times
FPNCHJ	Punch JAM	Punch motor stop	FPCHPS does not turn ON after punching operation.			FPCHPS OFF
FIN_TIME	Finisher paper early reaching JAM	Paper exit command of the preceding paper	The paper exit command of the next paper is received at the timing earlier than the specified paper interval.	Specified paper interval time	150 [msec]	(Specified paper interval time) - 150) [msec]
FIN_PAOF	Paper attribute data reception overflow	Paper information data command is received.	Paper information data of more than allowable buffer (16 sheets) are received.			16 sheets
FPATPD_S	Saddle transport remaining JAM	Transport operation is started after folding operation.	FSATPD does not turn OFF within the specified time.	(Paper length/ 2 - 26.2) [mm]	(Paper length/ 2 - 26.2) [mm]	(Paper length/ 2 - 26.2) x 2 [mm]
FPPD3_N	Saddle paper exit not-reached JAM	Thrusting operation is started.	FPPD3 does not turn ON within the specified time.	66.9 [mm]	66.9 [mm]	133.8 [mm]
FPPD3_S	Saddle paper exit remaining JAM	Transport operation is started after folding operation.	FPPD3 does not turn OFF within the specified time.	(Paper length/ 2 - 26.2) [mm]	(Paper length/ 2 - 26.2) [mm]	(Paper length/ 2 - 26.2) x 2 [mm]
FSSMJ	Stapler shift motor JAM	Driving the stapler shift motor is started.	Change from FSSHPS ON to OFF is not detected within the specified time during the stapler shift operation.	1434 [msec]	1434 [msec]	2868 [msec]
			Change from FSSHPS OFF to ON is not detected within the specified time during the stapler shift operation.	2085 [msec]	2085 [msec]	4170 [msec]
			Change from FSSSHPS ON to OFF is not detected within the specified time during the stapler shift operation.	401 [msec]	401 [msec]	802 [msec]
			Change from FSSSHPS OFF to ON is not detected within the specified time during the stapler shift operation.	3179 [msec]	3179 [msec]	6358 [msec]
			Change from FSSSW2 ON to OFF is not detected within the specified time during the stapler shift operation.	138 - 503 [msec]	138 - 503 [msec]	276 - 1006 [msec]
			Change from FSSSW2 OFF to ON is not detected within the specified time during the stapler shift operation.	291 - 803 [msec]	291 - 803 [msec]	582 - 1606 [msec]
FDRLMJ	Paper exit roller lift motor JAM	Driving the finisher paper exit roller lift motor is started.	Change from FDRHS ON to OFF is not detected within the specified time during the paper exit roller lift operation.	176 [msec]	176 [msec]	352 [msec]
			Change from FDRHS OFF to ON is not detected within the specified time during the paper exit roller lift operation.	235 [msec]	235 [msec]	470 [msec]
FSDMJ	Saddle motor JAM		JAM which is not detected yet			

JAM code	JAM content	JAM detection method		Basic distance (A) [mm]	JAM margin distance (B) [mm]	JAM detection distance (A+B) [mm]
		JAM detection start trigger	JAM judgment condition			
FGMJ	Gripper motor JAM	Driving the gripper motor is started.	Change from FGHP ON to OFF is not detected within the specified time during the gripper operation.	187 [msec]	187 [msec]	374 [msec]
			Change from FGHP OFF to ON is not detected within the specified time during the gripper operation.	535 [msec]	535 [msec]	1070 [msec]
FSPTMJ	Saddle paper transport motor JAM	Driving the saddle paper transport motor is started.	Change from FSRHS ON to OFF is not detected within the specified time during the paper transport roller lift operation in the saddle section.	37 [msec]	37 [msec]	74 [msec]
			Change from FSRHS OFF to ON is not detected within the specified time during the paper transport roller lift operation in the saddle section.	24 [msec]	24 [msec]	48 [msec]

### 3. Image send communication report code

#### A. Outline and code system descriptions

After completion of communication, the communication report table, the communication management table, and the protocol are described on the communication report column.

The communication report code is composed as follows:

Communication report: XX (XXXX)

The upper 2 digits of the communication report code:

Communication report code of 00 – 99 (Refer to communication report main code.)

The lower 4 digits of the communication report code:

Used by the serviceman.

The upper 2 digits: Communication report sub code 1 (Refer to communication report sub code 1.)

The lower 2 digits: Communication report sub code 2 (Refer to communication report sub code 2.)

#### Important

The communication report sub code 1 and sub code 2 are in hexadecimal notation. (The others are in decimal notation.)

#### Important

The communication report sub code 1 is not used in the these models.

#### B. Details

##### (1) Communication report main code

Report code	Final receive signal (Send side)	Final receive signal (Receive side)
0	Abnormal signal	Abnormal signal
1	NSF, DIS	(SID), (SUB), NSS, DCS
2	CFR	(PWD), (SEP), NSC, DTC
3	FTT	EOP
4	MCF	EOM
5	PIP, PIN	MPS
6	RTN, RTP	PRI-Q
7	No signal, DCN	DCN
8	PPR	PPS-EOP
9		PPS-EOM
10		PPS-MPS, PPS-NUL
11	RNR	RR
12	CTR	CTC
13	ERR	EOR-Q
14		PPS-PRI-Q
16	Abnormal signal	Abnormal signal
17	NSF, DIS	SID, SUB, NSS, DCS
18	CFR	PWD, SEP, NSC, DTC
19	FTT	PPS-EOP
20	MCF	PPS-EOM
21	PIP, PIN	PPS-MPS, PPS-NUL
22	RTN, RTP	PRI-Q
23	No signal, DCN	DCN
24	PPR	
25	RNR	RR
26	CTR	CTC
27	ERR	EOR-Q
28		PPS-PRI-Q
29	V.8 Phase-1	V.8 Phase-1
30	V.8 Phase-2	V.8 Phase-2
31	V.8 Phase-3	V.8 Phase-3

#### Important

For report codes 16 – 31, V.34 MODE COMMUNICATION.



Report code (Communication result)	Display in the column of result	Content of communication interruption
0 – 31	Refer to "previous table".	Depends on the point of communication interruption. For 16 or later, V.34 mode communication.
33	BUSY	The calling side cannot establish connection with the remote party.
34	CANCEL	A communication interruption command is made during sending/receiving. The interruption key is pressed for interruption of input. <Send/Receive/Polling/Bulletin board>
35	NG35 XXXX	Power is failed during sending/receiving. <Send/Receive/Polling/Bulletin board>
36	(No record paper)	
37	(Record paper jam)	
38	MEM. FULL	Memory over during reception. <Receive/Polling> Print is not made during reception in acting reception inhibit. <Receive/Polling>
39	(Number of paper unmatched)	
40	(Relay not received)	
41	LENGTH OVER	The send data length of one page exceeds the limit (2m) in sending. <Send/Bulletin board>
42	LENGTH OVER	The receive data length of one page exceeds the limit. <Receive/Polling>
43	(Communication) (OK)	Speaking before data transmission
44	ORIGINAL ERROR	A document jam occurs in direct sending. <Send>
45	(Picture quality error)	
46	NO RESPONSE	The FAX signal from the remote party is not detected within T1 time. <Send/Polling> (When in recall, however, the recall setting in case of a communication error is valid.)
47	TX DECODE ERROR	A decode error occurs in the FAX board. <Send/Bulletin board>
48	OK	Normal end of communication
	OK REPLY RECEIVE	OK in Internet FAX send with reception confirmation.
49	NO RX POLL	The called side does not have polling function in polling reception. <Polling> The called side has no data to send. <Polling>
50	RX POLL FAIL	In polling reception, DCN is received for DTC. <Polling> In polling sending, there is no send data. <Bulletin board>
51	PASS # NG	In polling sending, the allow number is not matched. <Bulletin board> In polling sending, the system number is not matched. <Bulletin board>
52	(No confidential function in remote party)	In confidential sending, the remote party does not have confidential function. <Send> (Including other company's machines) 1) The NSF signal has not "Confidential function" bit. 2) The NSF is not a Sharp machine.
53	(Confidential not received)	1) In confidential sending, DCN is received for NSS. <Send>
54	(Confidential BOX NO NG)	1) In confidential reception, a confidential box number which is not registered is specified.
55	(No relay function in remote party)	In relay command sending, the remote machine has no relay function. <Send> (Including other company's machine) 1) The NSF signal has not "Confidential function" bit. 2) The NSF is not a Sharp machine.
56	NO REL RX	1) In relay command sending, DCN is received for NSS. <Send> 2) In relay command reception, a remote station number which is not registered is specified. <Receive> 3) In F code relay broadcasting, an F code relay command is received. <Receive>
57	(Relay ID unmatched)	1) In relay command reception, the relay ID does not match. <Receive>
58	REJECTED	In reception, data are sent from a remote machine of receive inhibit number. <Receive> (Not rejected in the bulletin board send or the F code bulletin board send.)
59	RX NO F-CODE POLL	In F code polling (calling), the remote machine has no DIS bit 47 (polling function). <Polling> In F code polling (calling), the called side has no send data. (DIS bit 9 is 0.) <Polling>
60	NO F-CODE POLL	In F code polling (calling), DCN is received for SEP. <Polling> In bulletin board, there is no send data for SEP. <Bulletin board>
61	RX POLL # NG	In bulletin board, the sub address (bulletin board number (SEP)) is not matched. <Bulletin board>
62	F POLL PASS # NG	In bulleting board, the pass code (PWD) is not matched. <Bulletin board>
63	NO F FUNC	In F code sending, the remote machine has no DIS bit 49 (sub address function). <Send> (Check that the remote machine conforms to F code.)
64	NO F-CODE	In F code sending : <Send> 1) DCN is received for SUB. --- Check the box number. 2) DCN is received for SID. --- Check the box number and pass code.  In F code receiving : <Receive> "F code relay broadcasting" or "F code confidential reception" is "Inhibited with soft SW."
67	F PASS # NG	In F code receiving, the pass code (SID) is not matched. <Receive>
68	BOX NO. NG	In F code reception, a box number which is not registered is specified. (SUB is not matched.) <Receive>
69	MEMORY OVER	Memory over in quick online sending <Send>
70	(JOB MEMORY OVER)	In PC-FAX reservation, the number of remote parties is exceeded. <Send>
71	NG71 XXXX *1	In PC-FAX reservation, data sent from PC includes some errors. <Send>
72	(NG72 XXXX) *1	In department management setting on the machine side: • In reservation from PC-FAX or PC-Internet FAX, a department number which is not registered on the machine side is specified. <Send> • In reservation from PC-FAX or PC-Internet FAX, the department number is not specified. <Send>
73	NG73 XXXX *1	In reservation from PC-FAX or PC-Internet FAX, the use quantity limit is exceeded. <Send>
74	NG74 XXXX *1	When reserving specified filing in document filing in PC-FAX or PC-Internet FAX; • The pass-code for the folder is set on the machine side and the pass-code from PC-XXX does not match with it. <Send> • The pass-code for the folder is set on the machine side and no pass-code is specified by PC-XXX. <Send>

Report code (Communication result)	Display in the column of result	Content of communication interruption
75	NG75 XXXX *1	<ul style="list-style-type: none"> <li>Reservation cannot be made due to machine busy. (Reservation of PC-FAX cannot be accepted.)</li> <li>When "PC-FAX or PC-internet FAX send inhibit" is set on the machine side.</li> </ul>
76	NG76 XXXX *1	Reserved with receive confirmation request in PC-Internet FAX, but the Internet FAX sender is not registered on the machine side. <Send>
77	NG77 XXXX *1	In reserving specified filing in PC-FAX or PC-Internet FAX, the machine has no filing function.
78	NG78 XXXX *1	The filing function is inhibited on the machine side when filing specification is reserved by PC-FAX or PC-Internet FAX.
79	NG79 XXXX *1	An authentication error occurs when PC-FAX or PC-Internet FAX is reserved.
80	NG80 XXXX *1	NIC connect failure (network abnormality) <ul style="list-style-type: none"> <li>Check for disconnection of cables.</li> <li>A network trouble (CE-XX) occurs.</li> <li>The port is set to DISABLE.</li> <li>Authentication of the POP server is failed when POP before SMTP is enabled.</li> <li>When an error other than the communication result code 93 or 94 in D-SMTP send (including error response of 5XX)</li> </ul>
81	NG REPORT	In Internet FAX send, reply of receive confirmation of the remote machine is not normal. (Including PC-Internet FAX). <ul style="list-style-type: none"> <li>Error of the disposition-modifier.</li> <li>The disposition modifier is not in an error, and the disposition type is other than displayed, dispatched, or processed.</li> </ul>
82	NO REPORT	In Internet FAX send, time-out occurs in waiting for receive confirmation from the remote machine. (Including PC-Internet FAX). <ul style="list-style-type: none"> <li>In a case where send confirmation wait time-out time is other than 0, when send confirmation reply from an Internet FAX destination is not received.</li> <li>Recalls of the set number of recalls are performed, but send confirmation reply from an internet FAX destination is not received.</li> </ul>
83	NG LIMIT	In E-mail/FTP, Internet FAX send, the send data size exceeds the upper limit of send data.
84	REJECTED	In e-mail receive, a sender is registered in receive reject address/domain. <Receive>
85	NG85 XXXX *1	In e-mail receive, an error occurs in communication with POP3 server. <ul style="list-style-type: none"> <li>Header acquisition error.</li> <li>Time-out during mail receive</li> </ul>
86	RECEIVED	In e-mail receive, an unsupported attached file is received. Only the TIFF-F type is supported for attached files. <ul style="list-style-type: none"> <li>The TIFF-F type of the attached file cannot be recognized.</li> <li>There is no attached file.</li> </ul>
87	NG87 XXXX *1	In e-mail receive, an attached file cannot be stored in memory. <ul style="list-style-type: none"> <li>Memory over</li> </ul>
88	NG88 XXXX *1	In SMTP e-mail receive, an attached file cannot be stored in memory. <ul style="list-style-type: none"> <li>Cannot be stored in memory.</li> <li>The number of items of acting receive data is the maximum, and an additional data cannot be stored.</li> </ul>
89	NG89 XXXX *1	In SMTP e-mail receive, an error occurs in communication with the mail server. <ul style="list-style-type: none"> <li>Time-out occurs during e-mail receive.</li> </ul>
90	NG90 XXXX *1	After reservation by re-operation of document filing, conversion for image send cannot be made.
91	NG91 XXXX *1 *2	Data cannot be written to the memory device when Scan To USB is executed. <ul style="list-style-type: none"> <li>The memory device is disconnected during writing to the memory device.</li> <li>An error occurs due to a memory device trouble.</li> </ul>
92	NG92 XXXX *1 *2	The USB device memory overflows during writing data into the memory device when "Scan to USB" is executed.
93	NG93 XXXX *1	When error in D-SMTP send (with recall) <ul style="list-style-type: none"> <li>An error response of 4XX occurs during communication with the SMTP server.</li> <li>Time out occurs after establishment of connection with the SMTP server.</li> </ul>
94	NG94 XXXX *1	When busy in D-SMTP send <ul style="list-style-type: none"> <li>Time out occurs during establishment of connection with the SMTP server.</li> </ul>
95	NG95 XXXX *1	When the path is too long in execution of Scan To USB.
96	NG96 XXXX *1	When the normal process is not executed in the secure mail sending.
98	NG98 XXXX *1	The copy inhibit pattern is detected when scanning a document.
99	NG99 XXXX *1	A document which is inhibited to be copied such as a banknote is scanned.

\*1: For a job status result in "Display in the column of result," "NG △△ XXXX" is displayed. "△△" is the code number.

For a communication result, "Communication error △△ (XXXX)" is displayed.

\*2: The error code of Scan To USB is specified only in the job log.

- When the communication result is OK, the communication sub code 1 and the communication sub code 2 are "0000."
- Errors in ( ) are not used.

## (2) Communication report sub code 1

The communication report sub code 1 (upper 2 digits) are always indicated as "00."

## (3) Communication report sub code 2

Report code 2	Content of communication interruption	Send/Receive
00	When the conditions after 01 do not apply.	Send/Receive
01	Send length over	Send
02	EOL time up	Receive
03	Carrier detection time up	Receive
04	Time up of the communication start command from the machine side	Receive
05	Time up in phase C (8 min)	Send
06	Memory image decode error	Receive
07	Memory image decode error	Send
08	Time up between frames in phase C (Report code is 0 or 16.)	Send/Receive
09	Not used	—
10	Not used	—
11	Polarity reversion detection	Receive
12	Invalid command reception	Receive
13	Time up (1-minute timer/6-second time)	Receive
14	PUT error	Receive
15	In V.34 mode, time up is generated when shifting from Primary to Control.	Receive
16	In V.34 mode, time up is generated when shifting from Control to Primary.	Receive
17	Command receive time-up from MFP controller	Receive
18	Not used	—
19	Not used	—
20	Polarity reversion detection	Send
21	Invalid command reception	Send
22	Fallback retry number over	Send
23	Command retry number resend over	Send
24	Time up (T5 timer)	Send
25	Time up (T5 timer) in V.34 mode	Send
26	In V.34 mode, time up is generated when shifting from Primary to Control.	Send
27	In V.34 mode, time up is generated when shifting from Control to Primary.	Send
28	When sending the FSK signal, no response of send completion is sent back from the MODEM chip within a certain time. (V.34, other than V.34)	Send
29	Not used	—
30	A communication error is generated between MFP controller and Modem controller. (Report code is 0 or 16.)	—
31	DC current not detected (busy)	Send
32	Dial tone not detected (busy)	Send
33	Busy tone detection (busy)	Send
34	T0 time up (Remote machine not responding)	Send
35	T1 time up (Remote machine not responding)	Send
36	In dialing, polarity reversion detection (Remote machine not responding)	Send
37	Calling is not made (busy)<Collision detected (including CNG detection)>	Send
38	Not used	—
60	In resend of document filed data, an error occurs in decoding or coding.	Resend
61	In resend of document filed data, setting to inhibit resolution conversion is made. (The resolution after resend is set to be Enlarged.)	Resend
62	In resend of document filed data, rotation setting is made for data which cannot be rotated.	Resend
63	In resend of document filed data, data cannot be stored in HD after conversion of resolution for resend.	Resend
64	In resending data of document file, during conversion for resending, the number of IMS management pages exceeds the upper limit (999). (IT occurs in OSA Scan to FTP also, resulting in memory over.)	Resend OSAScanToFTP
70	E-mail header acquisition error	E-mail receive
71	Time out occurs during e-mail receive.	E-mail receive
72	Receive reject occurs during e-mail receive.	E-mail receive
73	Network communication cannot be made due to port disable.	Network send
74	An authentication of the POP server is failed when POP before SMTP is enabled.	Network send
75	In the setting of SSL communication, when SSL communication is tried but the server side does not support SSL.	Network send
76	There is no image in network communication (transfer).	Network send
80	There is no attached file in received e-mail.	E-mail receive
81	The attached file of received e-mail is not of TIFF type which is supported.	E-mail receive
82	The TIFF type of the attached file in received e-mail cannot be recognized. ID error	E-mail receive
83	The TIFF type of the attached file in received e-mail cannot be recognized. Endian error	E-mail receive
84	The TIFF type of the attached file in received e-mail cannot be recognized. Version error	E-mail receive
85	The TIFF type of the attached file in received e-mail cannot be recognized. Tag data error	E-mail receive
86	The TIFF type of the attached file in received e-mail cannot be recognized. Tag parameter error	E-mail receive
87	The TIFF type of the attached file in received e-mail cannot be recognized. Header size error	E-mail receive

Report code 2	Content of communication interruption	Send/Receive
88	The TIFF type of the attached file in received e-mail cannot be recognized. Data error	E-mail receive
90	In e-mail receive, an attached file cannot be stored in memory. Memory over. Cannot be stored in memory.	E-mail receive
91	In e-mail receive, an attached file cannot be stored in memory. The file size is too great to be stored in memory.	E-mail receive
92	In SMTP e-mail receive, an attached file cannot be stored in memory. Cannot be stored in memory.	E-mail receive

When the sub code 2 is "08" or "30" and the communication report is "OK," the report code is "00" or "16."

## 4. Dial tone

When shipping from the factory, the dial tone detection when sending is set to Enable (changed from OFF to ON). When installing this machine, be sure to check and confirm that the dial tone is properly detected and the auto dial sending is enabled.

Check to confirm that the continuous buzzer sound is heard when the on-hook key is pressed. (Press the on-hook key again to cancel the buzzer sound.)

If facsimile communication cannot be executed normally through the IP telephone line, try the general telephone line.

## [7] FIRMWARE UPDATE

### 1. Outline

#### A. Cases where update is required

ROM update is required in the following cases:

- 1) When there is a necessity to upgrade the performance.
- 2) When installing a new spare part ROM for repair to the machine.
- 3) When installing a new spare parts PWB unit (with ROM) for repair to the machine.
- 4) When there is a trouble in the ROM program and it must be repaired.

#### B. Notes for update

##### (1) Relationship between each ROM and update

Before execution of ROM update, check combinations with ROM's installed in the other PWB's including options. Some combinations of each ROM's versions may cause malfunctions of the machine.

#### C. Update procedures and kinds of firmware

There are following methods of update of the firmware.

- 1) Update method using SIM 49-1
- 2) Update method using FTP
- 3) Update method using the Web page
- 4) Update method using the CN update function (There are three methods.)

Normally, one of 1) - 3) is used to update the firmware.

When any one of 1) - 3) is interrupted by an error such as power-off during updating, etc., and when retries of these methods are failed, the method 4) is employed.

##### Firmware types

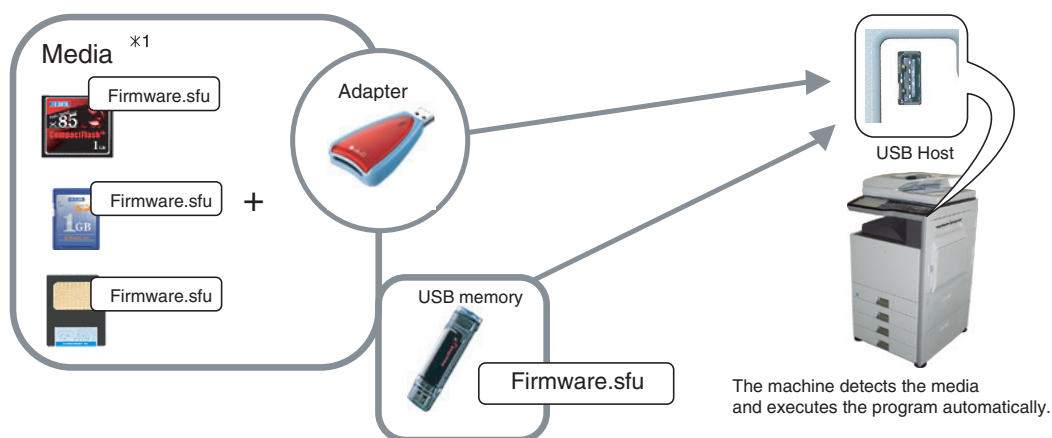
The firmware type can be displayed by SIM22-5.

Use SIM22-5 to check the firmware type.

### 2. Update procedure

#### A. Update method using SIM 49-1

For the update, connect the media or USB memory to the USB port that exists in the main body, and select the firmware data in the media or USB memory by simulation screen in the main unit.



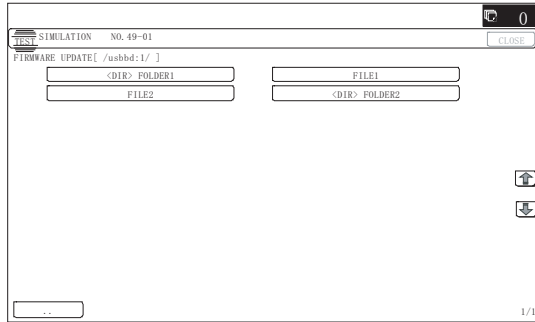
\*1:

- Store the firmware data (xxx .sfu) to the media or USB memory beforehand.
- The media used for the update must have an enough capacity for storing the firmware data.
- The USB memory equipped with the security (secure) function cannot be used.

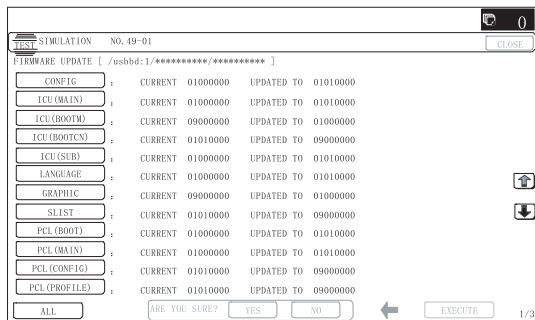
#### Execution of the firmware by SIM49-01

- 1) Insert the media or USB memory which stores the firmware into the main unit. (Be sure to use the USB I/F on the operation panel.)
- 2) Enter the SIM49-01.

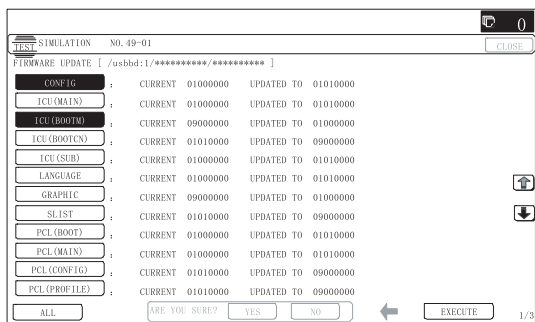
Press the key of the file to be updated. The screen transfers to the update screen.



- \* The number of key changes according to the number of the sfu file in the media or USB memory inserted.
  - \* If the media or USB memory was not inserted when entry to the SIM49-01 screen, "INSERT A USB MEMORY DEVICE CONTAINING MFP FIRMWARE [OK]" is displayed on the screen. Insert the media or USB memory and push the [OK] key to open the file. If the media have not been inserted and [OK] key is pushed, the next screen does not appear and the screen waits the entry. Conversely, if the media or USB memory is pulled out on the file list screen, the error is detected by the [FILE] key pressing, and the first screen appears.
- 3) Current version number and the version number to be updated will be shown for each firmware respectively.

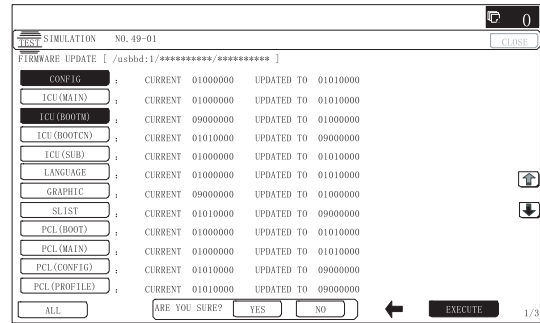


- 4) Press [ALL] key.  
All the firmware programs are selected.

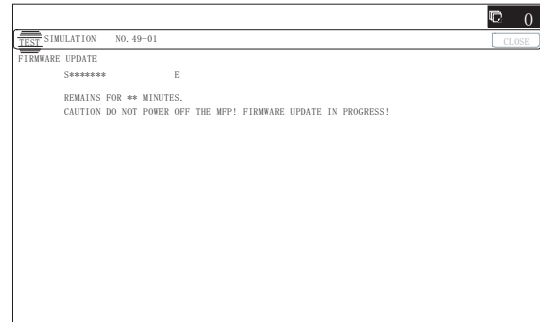


- \* Normally select all the firmwares and execute updating.
- \* In this case, firmwares which do not exist on the machine side are ignored.  
To update a certain firmware only, select the firmware with the firmware display key.
- \* If firmware's key is not selected, [EXECUTE] key is gray out and cannot be pressed.

- 5) Press [EXECUTE] key. "ARE YOU SURE? [YES] [NO]" becomes clear. Press [YES] key to start the update of selected firmware.

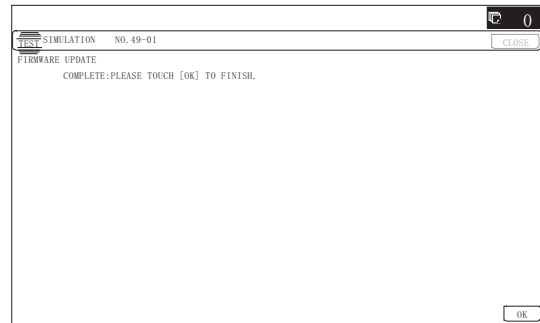


The progress is displayed on right side of "FIRMWARE UPDATE" title by 20 steps.



At this time, only the progress gauge is displayed on the screen, and the version and the firmware selection key are not displayed.

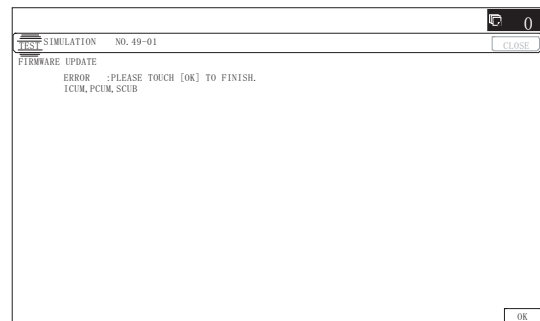
- 6) If the update is normal completion, following screen is displayed.



Press [OK] key. (The machine is rebooted.)

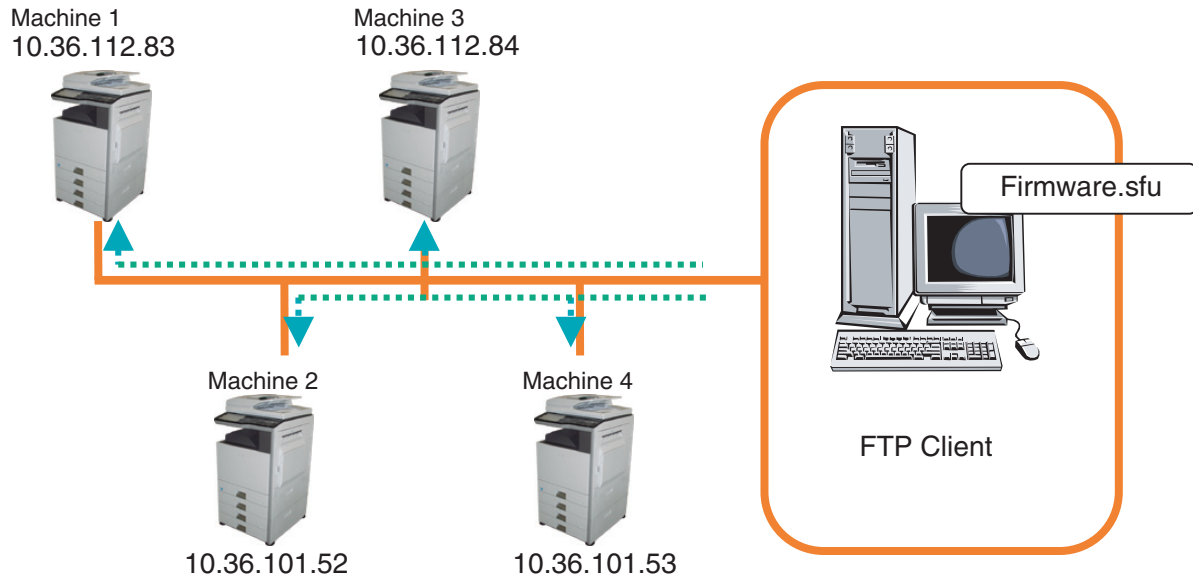
Go to SIM22-05 and confirm the firmware has upgraded successfully.

- 7) If the update is not normal completion, following screen is displayed.



## B. Firmware update using FTP

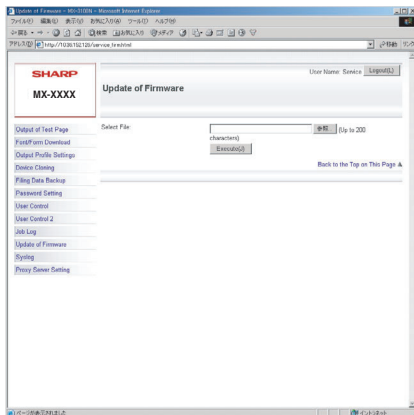
FTP software is used to transfer the firmware data (extension ".sfu") from the PC to the machine. The controller recognizes the firmware identifier and the machine automatically switches to firmware write mode. After the firmware is updated, the machine automatically resets.



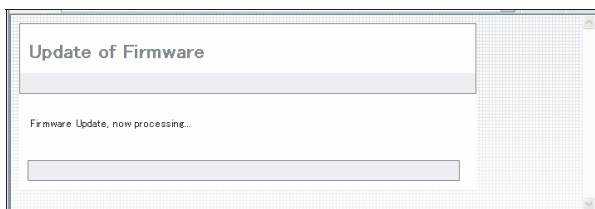
## C. Firmware update using the Web page

An Web browser (service technician's Web page) is used to update the firmware.

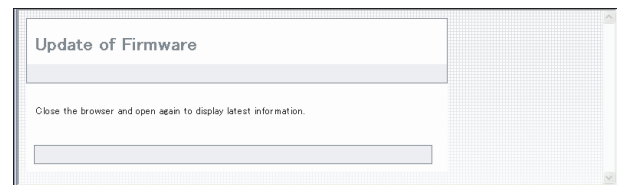
- 1) Start the Web browser on a PC and enter the specified URL. A special firmware upgrade page appears.
- 2) Click the "Update of Firmware" key in the Web page. Click the [Browse] key and select the firmware for the update.



- 3) After selecting the file, click the [Submit] key to send the firmware to the machine. Update processing begins. While processing takes place, "Firmware Update, now processing..." appears.



- 4) When the firmware update is finished, "Firmware Update completed. Please reboot the MFP." appears. Pressing the [Reboot] key, the machine will restart to complete the update. The browser will shift to the following screen.



"Close the browser and open again to display latest information." will be displayed.

- 5) Check the firmware version of machine again.

## D. Firmware update using the CN update function (There are three methods.)

### (1) Outline

The update method using the DIP SW of the MFP PWB is called the CN update.

#### a. Function

There are the following three functions in the CN update mode.

##### 1) Firmware update function

This function is used to update the firmware by transferring data from the PC which is connected to the MFP PWB, the SCU PWB, the PCU PWB, the FAX PWB, and various options by means of a USB memory or USB cable.

This is basically the same as SIM49-01, but differs in the following points:

When the power is shut down or an abnormality occurs in a section other than the boot program for some reasons during firmware update operation of other method than the CN update, this method can be used to update the firmware.

If, however, an abnormality occurs in the boot program, the SD card must be replaced with a new one having the normal boot program.

If the boot animation is not displayed, there is an abnormality in the boot program.

If the boot animation is displayed but "Copying is enabled" is not displayed on the copier basic menu, there is an abnormality in the main program.

##### 2) Firmware version check function

(The method to check the firmware version by using SIM22-5 is easier than this method. Therefore, it is not described in this manual.)

##### 3) ROM making function

(This function is not used in the market, and not described in this manual.)

#### b. Purpose

This function is used in the following cases:

##### 1) When an error occurs during firmware update operation other than the CN update.

When the power is shut down or an error occurs in a section other than the boot program for some reasons during firmware update operation of other method than the CN update, this method can be used to update the firmware.

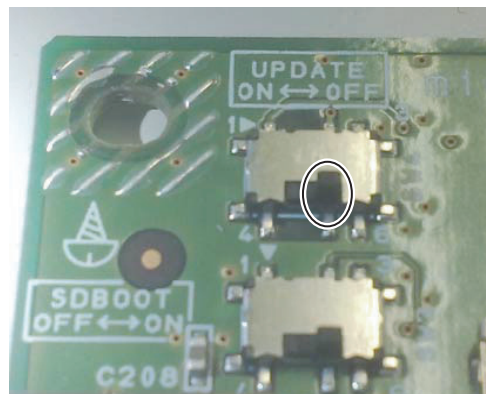
If, however, an abnormality occurs in the boot program, the SD card must be replaced with a new one having the normal boot program.

If an error occurs in the boot program, this method cannot be used. In such a case, the SD card must be replaced with a new one having the normal boot program.

#### c. DIP-SW used in the CN update mode

To enter the CN update mode, turn ON the UPDATE DIP-SW on the MFP PWB and boot the machine.

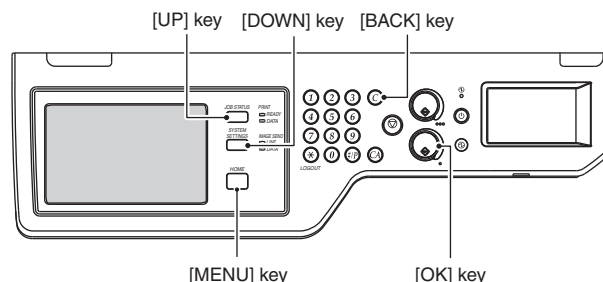
When terminating the CN update mode, reset UPDATE DIP-SW to OFF (normal mode).



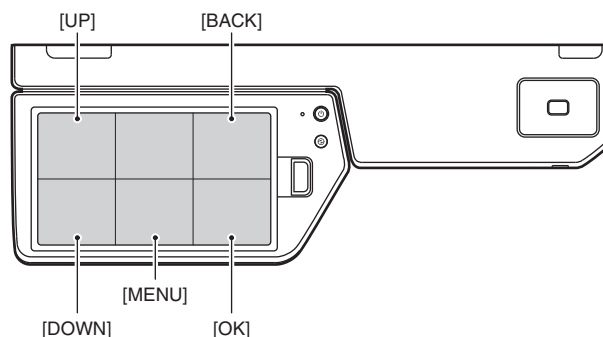
#### d. Keys used in the CN update mode

The following five keys are used for operations in the CN update mode. Be careful that the functions of the keys differ those in the normal mode.

##### • 18cpm/20cpm/23cpm/31cpm(G) machine



##### • 26cpm/36cpm/31cpm(A) machine



Key name	Functions in the CN update mode
[OK] key	Executes the selected function or item.
[MENU] key	Selects a menu.
[BACK] key	Selects a menu. (Serves as a cancel key in the execution check screen.)
[UP] key	Selects an item.
[DOWN] key	Selects an item.



## (2) Operating procedures

### a. Firmware update function

This function is used to revise the firmware by using the USB memory for the MFP PWB, the SCU PWB, the PCU PWB, the FAX PWB, and each option.

It is basically same as SIM 49-01, but differs in the following points.

- 1) The update target ROM is automatically selected.
- 2) When the power is shut down or an abnormality occurs in a section other than the boot program for some reasons during firmware update operation of other method than the CN update.

If, however, an abnormality occurs in the boot program, this method cannot be used. On that case, the SD card must be replaced with a new one having the normal boot program.

When the boot animation is displayed but "Copying is enabled" is not displayed on the copier basic menu, there is an abnormality in the main program (SD card).

#### a-1. Necessary items

- 1) Insert the SD card to the MFP PWB of the machine.
- 2) USB memory with the firmware file (SFU) saved in it.

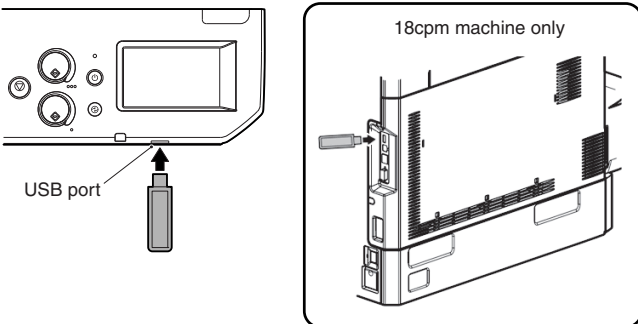
#### Note

Save the firmware file in the main directory or in a one-level lower directory.

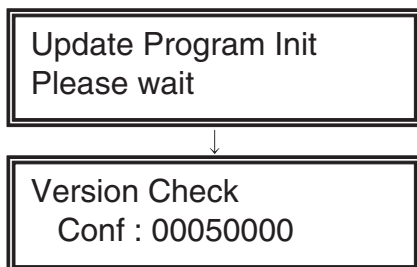
#### a-2. Procedures

- 1) Turn OFF the power, and remove the cabinet and the MFP PWB cover.
- 2) Turn ON the DIP SW of the MFP PWB UP DATE. (Tilt it to the PWB side.)
- 3) Install the USB memory into the USB port.

#### USB memory installing position



- 4) Turn ON the power.
- 5) Check to confirm that the machine starts booting. (It takes more than ten seconds to display the menu.)



Display when booting is completed

- 6) Select the firmware update mode.  
Select the update mode with [MENU] key and [BACK] key.



Display of the firmware update mode

- 7) Press [OK] key.  
The firmware file saved in the USB memory is retrieved, and the file selection menu is displayed.



Display of file selection

- 8) Select the firmware file (SFU).  
Select the target firmware file (SFU) with [UP] key and [DOWN] key.

When [OK] key is pressed with a directory name (the head: "> D") displayed, the menu goes to the one-stage lower directory. When [BACK] key is pressed in the lower-stage directory, the menu returns to the original upper directory.

- 9) Press [OK] key.  
The selected firmware file (SFU) is read. It takes about one minute.



Display of file reading

- 10) After completion of reading, the firmware update process is continued.

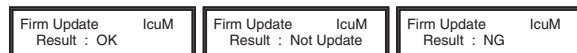


Display of the firmware update process

\* The abbreviated name of the firmware which is under update process is indicated on the right upper corner of the display.

\* During the update process, the display may flash instantaneously. It is a normal operation.

- 11) Check the update result.  
Use [UP] key and [DOWN] key to display the results of all the firmware programs.



Display of the firmware update result

OK: Update is completed successfully.

NG: Update is failed.

Not Update: Update is not executed.

- 12) Turn OFF the power.
- 13) Turn OFF the DIP SW of the MFP PWB UP DATE. (Set the DIP-SW to the normal mode.)
- 14) Turn ON the power, and check to confirm that the machine boots up normally.  
Check to confirm that the boot animation is displayed.  
Check to confirm that "Copying is enabled" is displayed on the copier basic menu.
- 15) Check to confirm the version of each firmware with SIM22-5.
- 16) Attach the MFP PWB cover and the cabinet.

## [8] MAINTENANCE

### 1. Works necessary when executing the maintenance

#### A. Counter check

Before execution of the maintenance, execute SIM22 to check the counter values of the following counters to confirm consuming states of each section.

- 1) Each consumable part counter
- 2) Each unit counter
- 3) Trouble counter, JAM counter

#### B. Counter reset

When a part or consumable part is replaced with new one in the maintenance, execute SIM24 to reset the following counters.

- 1) Maintenance counter
- 2) Each consumable part counter
- 3) Each unit counter
- 4) Trouble counter, JAM counter

#### C. Firmware version check and upgrading

Execute SIM22-5 to check the firmware version, and upgrade it as needed. (SIM49-1)

#### D. Confirmation, adjustment

After completion of part replacement and cleaning, etc, execute the following procedures.

##### Items necessary to execute

Item				SIM to be used
ADJ 5	Print engine image distortion adjustment / OPC drum phase adjustment / Color registration adjustment (Print engine section)	ADJ5A	Print engine image distortion adjustment (Manual adjustment) / OPC drum phase adjustment (Automatic adjustment) / Color registration adjustment (Automatic adjustment)	50-22
ADJ10/SET1	Image quality adjustment		Copy image quality adjustment	
			Printer image quality adjustment	
		ADJ10B	Printer, copy color balance, density adjustments (Automatic adjustments) (Basic adjustments)	46-74

##### Items to execute as needed

Item				SIM to be used
ADJ 2	High voltage adjustment	ADJ2A	Main charger grid voltage adjustments	8-2
		ADJ2B	Developing bias voltage adjustments	8-1
		ADJ2C	Transfer current/voltage adjustment	8-6
ADJ 3	Image density sensor adjustment	ADJ3A	Image density sensor calibration	44-13
		ADJ3B	Image density sensor adjustment	44-2
ADJ4	Image lead edge position, image loss, void area, image off-center, image magnification ratio adjustments (Automatic adjustments)	ADJ4A	Print image main scanning direction automatic magnification ratio adjustment (Print engine)	50-28
		ADJ4B	Print image off-center automatic adjustment (Print engine) (Each paper feed tray)	50-28
		ADJ4C	Copy mode image lead edge position, image loss, void area, image off-center, sub scanning direction image magnification ratio automatic adjustment (Scanner) (Document table mode)	50-28
		ADJ4D	Copy mode image lead edge position, image loss, void area, image off-center, sub scanning direction image magnification ratio automatic adjustment (Scanner) (RSPF mode)	50-28
ADJ10/SET1	Image quality adjustment	ADJ10A	Scanner calibration (CCD calibration)	63-3 (63-5)

## 2. Display of maintenance execution timing

The message of maintenance execution timing is displayed when each counter reaches the set value. The relations between the messages and the counters are shown below.

### A. Maintenance counter

Display content	Display condition			Print JOB Enable/ Disable
	SIM26-38-A set value	Counter name	Counter value	
Maintenance required. Code: TA	0 (Print continue)	Maintenance counter (Total)	When the SIM21-1 set value is reached.	Enable
	1 (Print stop)		When 90% of the SIM21-1 set value is reached.	
Maintenance required. Code: TA	1 (Print stop)	Maintenance counter (Color)	When the SIM21-1 set value is reached.	Disable
Maintenance required. Code: CA	0 (Print continue)		When the SIM21-1 set value is reached.	Enable
	1 (Print stop)		When 90% of the SIM21-1 set value is reached.	
Maintenance required. Code: CA	1 (Print stop)		When the SIM21-1 set value is reached.	Disable
Maintenance required. Code: AA	0 (Print continue)	Both of total and color	When the SIM21-1 set value is reached.	Enable
	1 (Print stop)		When 90% of the SIM21-1 set value is reached.	
Maintenance required. Code: AA	1 (Print stop)		When the SIM21-1 set value is reached.	Disable

\* After execution of maintenance, be sure to execute SIM24-4 to clear the maintenance counter (Total) and the maintenance counter (Color).

### B. Primary transfer unit

Display content	Display condition			Print JOB Enable/ Disable
	SIM26-38-A set value	Counter name	Counter value	
Maintenance required.: TK1	0 (Print continue)	Primary transfer unit print counter	<b>18cpm machine:</b> When 80K is reached.	Enable
	1 (Print stop)		<b>20/23/26/31cpm machine:</b> When 100K is reached. <b>36cpm machine:</b> When 120K is reached.	

\* After execution of the maintenance, execute SIM24-4 to clear the primary transfer unit print counter, the accumulated number of rotations counter, and the use day counter.

### C. Secondary transfer unit

Display content	Display condition			Print JOB Enable/ Disable
	SIM26-38-A set value	Counter name	Counter value	
Maintenance required.: TK2	0 (Print continue)	Secondary transfer unit print counter	<b>18cpm machine:</b> When 240K is reached.	Enable
	1 (Print stop)		<b>20/23/26/31cpm machine:</b> When 300K is reached. <b>36cpm machine:</b> When 360K is reached.	

\* After execution of the maintenance, execute SIM24-4 to clear the secondary transfer print counter, the accumulated number of rotations counter, and the use day counter.

### D. Fusing unit

Display content	Display condition				Print JOB Enable/ Disable
	SIM26-38-A set value	SIM26-38-B set value	Counter name	Counter value	
Maintenance required.: FK1	0 (Print continue)	–	Fusing roller print counter (18/20cpm machine) Fusing belt print counter (23/26/31/36cpm machine)	<b>18/20/26/31cpm machine:</b> (Excpet North America) When 100K is reached. <b>23cpm machine:</b> When 100K is reached. <b>26/31cpm machine:</b> (North America) When 200K is reached. <b>36cpm machine:</b> When 240K is reached.	Enable
	1 (Print stop)	–			
Maintenance required.: FK2	0 (Print continue)	–	Pressure roller print counter	<b>18/20cpm machine:</b> When 100K is reached. <b>23/26/31cpm machine:</b> When 200K is reached. <b>36cpm machine:</b> When 240K is reached.	Enable
	1 (Print stop)	–			
Maintenance required.: FK3 (36cpm machine only)	–	0 (Print continue)	Fusing web print counter	When 120K is reached.	Enable
	–	1 (Print stop)			
Maintenance required.: FK3 (Pop-up) (36cpm machine only)	–	0 (Print continue)	Fusing web print counter	When Web end detection is ON.	Enable
	–	1 (Print stop)			

\* After execution of the maintenance, execute SIM24-4 to clear the fusing roller counter, the fusing belt counter, the fusing web print counter, the accumulated rotation number counter, and the use day counter.

## E. OPC drum

Display content	Display condition			Print JOB Enable/Disable
	SIM26-38-A set value	Counter name	Counter value	
Maintenance required.: DK	0 (Print continue)	OPC drum print counter (K)	<b>18cpm machine:</b> When 80K is reached. <b>20/23/26/31cpm machine:</b> When 100K is reached. <b>36cpm machine:</b> When 120K is reached.	Enable
	1 (Print stop)	OPC drum accumulated rotation number counter (K)	When 840K is reached.	
Maintenance required.: D (C/M/Y)	0 (Print continue)	OPC drum print counter (C/M/Y)	<b>18cpm machine:</b> When 50K is reached. <b>20/23/26/31cpm machine:</b> When 60K is reached. <b>36cpm machine:</b> When 70K is reached.	
	1 (Print stop)	OPC drum accumulated rotation number counter (C/M/Y)	When 840K is reached.	

\* After execution of the maintenance, execute SIM24-4 to clear the OPC drum print counter, the accumulated number of rotations counter, and the use day counter.

## F. Developer

Display content	Display condition			Print JOB Enable/Disable
	SIM26-38-A set value	Counter name	Counter value	
Maintenance required.: VK	0 (Print continue)	Developer print counter (K)	<b>18cpm machine:</b> When 80K is reached. <b>20/23/26/31cpm machine:</b> When 100K is reached. <b>36cpm machine:</b> When 120K is reached.	Enable
	1 (Print stop)	DV unit accumulated number of rotations (K)	When 840K is reached.	
Maintenance required.: V (C/M/Y)	0 (Print continue)	Developer print counter (C/M/Y)	<b>18cpm machine:</b> When 50K is reached. <b>20/23/26/31cpm machine:</b> When 60K is reached. <b>36cpm machine:</b> When 70K is reached.	
	1 (Print stop)	DV unit accumulated number of rotations (C/M/Y)	When 840K is reached.	

\* After execution of the maintenance, execute SIM24-4 to clear the developer print counter, the accumulated number of rotations counter, and the use day counter.

## G. Waste toner box

Display content	Display condition		Print JOB Enable/Disable
	Counter name	Counter value	
Check the waste toner box.	After detection of near end, pixel count 836K (equivalent to color 2K, monochrome 8K print)		Near end: Enable End: Disable

\* When the waste toner box is replaced with an empty one, the message disappears.

## H. Toner

Display content	Display condition			Print JOB Enable/Disable
	SIM26-38-A set value	Counter name	Counter value	
(K/C/M/Y) Prepare a toner (Near near end)	No relation	Toner motor rotation time	Specified time of rotations	Enable
(K/C/M/Y) Toner supply is low (Near end)	No relation	Toner supply amount is decreasing.	ATC sensor output variation	Enable
Replace the toner cartridge. (K) (End)	0 (Print continue)	The pixel count from near end reaches the specified value.	Specified pixel count	(Disable for a JOB which requires K toner)
	1 (Print stop)			
Replace the toner cartridge. (C/M/Y) (End)	0 (Print continue)	The pixel count from near end reaches the specified value.	Specified pixel count	Enable for monochrome, Disable for color
	1 (Print stop)			

### 3. Maintenance list

#### Main unit (18cpm machine)

×: Check (Clean, replace, or adjust according to necessity.) ○: Clean ▲: Replace △: Adjust ☆: Lubricate

Section/Unit work sequence	Name	Unit name	Work sequence	Part name	When calling	80 k	160 k	240 k	320 k	400 k	480 k	Remark
Monochrome consumable	Developing section	Developing unit (monochrome)	1	Developer	×	▲	▲	▲	▲	▲	▲	
			2	DV seal	×	×	×	×	×	×	×	Replace as needed.
			3	DV side seals F/R	×	×	×	×	×	×	×	Replace as needed.
			4	Toner filter	×	×	×	×	×	×	×	Replace as needed.
			5	Bias pin	×	×	×	×	×	×	×	
			6	Connector	×	×	×	×	×	×	×	
	OPC drum section	OPC drum unit	1	Drum	×	▲	▲	▲	▲	▲	▲	
			2	Cleaning blade	×	▲	▲	▲	▲	▲	▲	
			3	Toner reception blade	×	▲	▲	▲	▲	▲	▲	
			4	Side seals F/R	×	×	×	×	×	×	×	
			5	Charger cleaner	×	▲	▲	▲	▲	▲	▲	Integrated as a drum kit.

Section/Unit work sequence	Name	Unit name	Work sequence	Part name	When calling	50 k	100 k	150 k	200 k	250 k	300 k	Remark
Color consumable	Developing section	Developing unit (color)	1	Developer	×	▲	▲	▲	▲	▲	▲	
			2	DV seal	×	×	×	×	×	×	×	Replace as needed.
			3	DV side seals F/R	×	×	×	×	×	×	×	Replace as needed.
			4	Toner filter	×	×	×	×	×	×	×	Replace as needed.
			5	Bias pin	×	×	×	×	×	×	×	
			6	Connector	×	×	×	×	×	×	×	
	OPC drum section	OPC drum unit	1	Drum	×	▲	▲	▲	▲	▲	▲	
			2	Cleaning blade	×	▲	▲	▲	▲	▲	▲	
			3	Toner reception blade	×	▲	▲	▲	▲	▲	▲	
			4	Side seals F/R	×	×	×	×	×	×	×	
			5	Charger cleaner	×	▲	▲	▲	▲	▲	▲	Integrated as a drum kit.

Section/Unit work sequence	Name	Unit name	Work sequence	Part name	When calling	80 k	160 k	240 k	320 k	400 k	480 k	Remark
1	RPSF section	RPSF unit	1	Document pickup roller	○	○	○	○	○	○	○	Replace at 80K of the SPF paper feed counter or 1 year of use. When replacing the paper feed roller, apply grease to the paper feed shaft. GP-501MR (UKOG-0013QSZZ)
			2	Paper feed roller	○	○	○	○	○	○	○	
			3	Separation roller	○	○	○	○	○	○	○	
			4	Torque limiter SPF	×	×	×	×	×	×	×	Replacement reference: Replace referring to the paper feed counter value. SPF section torque limiter: Replace at 400K or 2 years of use.
			5	Take-up torque limiter	×	×	×	×	×	×	×	
			6	Discage brush	×	×	×	×	×	×	×	
			7	Registration roller	○	○	○	○	○	○	○	
			8	Transport roller 2	○	○	○	○	○	○	○	
			9	Transport roller 3	○	○	○	○	○	○	○	
			10	Paper exit roller	○	○	○	○	○	○	○	
			11	Sensors	×	×	×	×	×	×	×	
			12	Scan plate	○	○	○	○	○	○	○	
			13	Gears	×	×	×	×	×	×	×	
			14	Belts	×	×	×	×	×	×	×	
			15	OC mat	○	○	○	○	○	○	○	
2	Scanner section	Scanner unit	1	Drive belt	×	×	×	×	×	×	×	
			2	Drive wire	×	×	×	×	×	×	×	
			3	Sensors	×	×	×	×	×	×	×	
			4	Rails	☆	☆	☆	☆	☆	☆	☆	
			5	Mirror	○	○	○	○	○	○	○	
			6	Reflector	○	○	○	○	○	○	○	
			7	Scanner lamp	○	○	○	○	○	○	○	
			8	Lens	○	○	○	○	○	○	○	
			9	CCD	○	○	○	○	○	○	○	
			10	Table glass	○	○	○	○	○	○	○	
			11	SPF glass	○	○	○	○	○	○	○	

Section/Unit work sequence	Name	Unit name	Work sequence	Part name	When calling	80 k	160 k	240 k	320 k	400 k	480 k	Remark
3	Transfer section	Primary transfer unit	1	Separation pawl	—	×	×	×	×	×	×	Replace as needed.
			2	Primary transfer belt	—	▲	▲	▲	▲	▲	▲	When replacing, apply KYNAR powder.
			3	Secondary drive transmission gear	—	○	○	○	○	○	○	
			4	Primary transfer belt drive roller	—	○	○	○	○	○	○	
			5	Primary transfer belt follower roller	—	○	○	○	○	○	○	
			6	Primary transfer belt tension roller	—	○	○	○	○	○	○	
			7	Registration backup roller	—	○	○	○	○	○	○	
			8	Y auxiliary roller	—	○	○	○	○	○	○	
			9	PTC backup roller	—	○	○	○	○	○	○	
			10	Primary transfer roller	—	×	×	×	×	×	×	Replace as needed.
			11	Transfer cleaner seals F/R	—	×	×	×	×	×	×	Replace as needed.
			12	Primary transfer belt cleaner blade	—	▲	▲	▲	▲	▲	▲	
			13	Primary transfer toner reception blade	—	×	×	×	×	×	×	Replace as needed.
			14	Primary transfer operation mode detector	—	○	○	○	○	○	○	
4	Transfer section	Secondary transfer unit	1	Secondary transfer belt follower roller	—	—	—	○	—	—	○	
			2	Secondary transfer belt	—	—	—	▲	—	—	▲	Never use alcohol or solvents for cleaning..
			3	Secondary transfer belt drive roller	—	—	—	○	—	—	○	
			4	Secondary transfer backup roller	—	—	—	○	—	—	○	
			5	Secondary transfer belt tension roller	—	—	—	○	—	—	○	
			6	Secondary transfer roller	—	—	—	×	—	—	×	Replace as needed.
			7	Secondary transfer drive gear	—	—	—	×	—	—	×	Replace as needed.
			8	Separation cam	—	—	—	☆	—	—	☆	When replacing, apply UKOG-0299FCZZ to the shaft section.
			9	Secondary transfer frame	—	—	—	☆	—	—	☆	When replacing, apply UKOG-0299FCZZ to the shaft section.
5		Other	1	PTC unit	○	▲	▲	▲	▲	▲	▲	
			2	Image density sensor/Registration sensor/ Standard reflection plate	—	○	○	○	○	○	○	Remove dirt from the light emitting/receiving sections (transparent plastic sections) of the sensor and the standard reflection plate (gray plastic section) with dry waste cloth. *1
6	LSU section	LSU	1	Dust-proof glass	○	○	○	○	○	○	○	Use the LSU cleaning rod.
		Other	2	Cleaning base	×	Replace every time the waste toner box is replaced.						Attached to the waste toner box. (2 pcs.) / Replace when the waste toner box is replaced, or at 100K, or 2 years of use.
7	Manual paper feed section	Manual paper feed unit	1	Paper feed roller	×	○	○	○	○	○	○	Replace at 80K of each paper feed counter or after 2-year use.
			2	Separation roller	×	○	○	○	○	○	○	Replace at 80K of each paper feed counter or after 3-year use.
			3	Torque limiter	×	×	×	×	×	×	×	
			4	Transport roller 9	×	○	○	○	○	○	○	
			—	Sensors	×	×	×	×	×	×	×	
			—	Paper guides	○	○	○	○	○	○	○	

Section/Unit work sequence	Name	Unit name	Work sequence	Part name	When calling	80 k	160 k	240 k	320 k	400 k	480 k	Remark
8	Tray paper feed section	Tray paper feed unit	1	Paper pickup roller	×	○	○	○	○	○	○	Replace at 80K of each paper feed counter or after 1-year use
			2	Paper feed roller	×	○	○	○	○	○	○	Replace at 80K of each paper feed counter or after 2-year use
			3	Separation roller	×	○	○	○	○	○	○	Replace at 80K of each paper feed counter or after 3-year use
			4	Transport roller 4	×	○	○	○	○	○	○	
			5	Transport roller 2	×	○	○	○	○	○	○	
			6	Torque limiter	×	×	×	×	×	×	×	
			7	Sensors	×	×	×	×	×	×	×	
			—	Paper guides	○	○	○	○	○	○	○	
9	Paper registration section (paper transport section)/ Paper exit section/ ADU section	PS unit	1	Registration roller (Idle)	×	○	○	○	○	○	○	
			2	Registration roller (drive)	×	○	○	○	○	○	○	
			3	Transport roller 5	×	○	○	○	○	○	○	
			4	Sensors								
		Right door unit	5	Transport roller 7	×	○	○	○	○	○	○	
			6	Transport roller 8	×	○	○	○	○	○	○	
			7	Sensors								
		Fusing rear unit	8	Transport roller 6	×	○	○	○	○	○	○	
		Paper exit unit	9	Paper exit roller 1	×	○	○	○	○	○	○	
			10	Discharge brush	×	×	×	×	×	×	×	
			11	Sensors	×	×	×	×	×	×	×	
		Other	12	Paper dust removing unit	○	▲	▲	▲	▲	▲	▲	
			—	Paper guides	○	○	○	○	○	○	○	
10	Drive section	Main drive unit	1	Gears (grease)	×	×	×	×	×	×	×	Apply to the specified position when checking. FLOIL G-313S
			2	Shafts (grease)	×	×	×	×	×	×	×	
			3	Shaft earth sections (conduction grease)	×	×	×	×	×	×	×	Apply to the specified position when checking. FLOIL GE-676
			4	Belts	×	×	×	×	×	×	×	
			5	Sensors	×	×	×	×	×	×	×	
		Transport drive unit	6	Belts	×	×	×	×	×	×	×	Apply to the specified position when checking. HANARL FL-955R
			7	Connection arm	×	×	×	×	×	×	×	
			8	Shafts (grease)	×	×	×	×	×	×	×	
		Fusing drive unit	9	Shafts (grease)	×	×	×	×	×	×	×	
		Paper exit drive unit	10	Shafts (grease)	×	×	×	×	×	×	×	
			11	Belts	×	×	×	×	×	×	×	
11	Fusing section	Fusing unit	1	Lower separation pawl	×	×	×	×	×	×	×	Replace as needed.
			2	Lower separation pawl spring	×	×	×	×	×	×	×	Replace as needed.
			3	Separation plate	×	×	×	×	×	×	×	Replace as needed.
			4	Oil applying roller	×	▲	▲	▲	▲	▲	▲	
			5	Backup roller	×	▲	▲	▲	▲	▲	▲	
			6	CL roller bearing	×	▲	▲	▲	▲	▲	▲	
			7	Lower thermistor	×	×	×	×	×	×	×	Replace as needed.
			8	Pressure roller gear	×	×	×	×	×	×	×	Replace as needed.
			9	Pressure roller bearing	×	×	×	×	×	×	×	Replace as needed.
			10	Pressure roller	×	▲	▲	▲	▲	▲	▲	Apply grease to the shaft section when replacing. (UKOG-0235FCZZ)
			11	Sub thermistor	×	×	×	×	×	×	×	Replace as needed.
			12	Heat-insulating bush	×	×	×	×	×	×	×	Replace as needed.
			13	Heating roller bearing	×	×	×	×	×	×	×	Replace as needed.
			14	Fusing roller	×	▲	▲	▲	▲	▲	▲	Apply grease to the shaft section when replacing. (UKOG-0235FCZZ)
			15	Main thermistor	×	×	×	×	×	×	×	Replace as needed.
			16	Paper guides	○	○	○	○	○	○	○	
			17	Gears	×	×	×	×	×	×	×	
			18	Lower scraper assembly	×	▲	▲	▲	▲	▲	▲	